





UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

EXECUTIVE COMMITTEE MEETING, NOV. 1, 1866.

Present—Messrs. Betty, Anderson, Salter, Pass, Crotch, and Buott, jun. Mr. Pass in the Chair.

Mr. BUOTT, jun., in the absence of the Registrar, placed the minutes of Committee meetings, held on the 18th, 25th September, and 4th October, before the Executive, which were duly confirmed.

Letters were received from Liverpool, Halifax, Newcastle, Taunton, and other places, expressing the approval of the action of the London Committee.

Certain arrangements for the action of the Sub-Committee were decided upon.

Mr. BETTY moved, and Mr. SALTER seconded—that Mr. Anderson be appointed Chairman of the Publishing Committee, which was unanimously agreed to. And power was given to convene meetings whenever considered necessary.

Mr. BUOTT, jun., drew the attention of the Committee to the necessity of timely action to place the Society in a position to urge the claims of the trade upon the House of Commons during the approaching parliamentary session.

In reference to which Mr. BETTY thought that the incorporation of the trade would be most promoted by the removal of all misunderstandings, and the conciliation of all within the Society, and urged that its strength would be consolidated by this general sympathy.

Mr. ANDERSON proposed that Mr. Betty be elected a Treasurer of the Society in the place of Mr. Potter, resigned, which, upon being seconded by Mr. SALTER, was agreed to be referred to the Society's Solicitor for a guarantee of the legality of the proceeding.

Mr. BUOTT, jun., in accordance with the resolution No. 2, passed September 18th, proceeded to lay before the Committee the statement of accounts brought up to the present date. After some conversation, owing to the lateness of the hour, the question was referred to the next Committee meeting. Instructions were then given for notices to be issued for meetings to be held of the Publishing and Finance Committee on the Thursday following.

By Order of the Publishing Committee.

The following report of a meeting at Birmingham has been forwarded to us by Mr. Buott, the Secretary of the United Society:—

MEETING AT BIRMINGHAM TO PROMOTE THE INCORPORATION OF THE TRADE.

A meeting of Chemists and Druggists to promote the incorporation of the trade was held at the Union Hotel, Birmingham, on Friday the 26th October. Mr. Snape, M.P.S., was advertised to occupy the chair, but in his absence which was caused by severe illness, Mr. Alderman Bagott kindly presided over the meeting.

Mr. BAGOTT declared his sympathy with the object of the meeting, and was of opinion that the low state to which the trade was reduced showed the necessity of a reform—which could only be effected by incorporating all existing Chemists and Druggists. He further trusted that the Pharmaceutical Council would see how desirable it was to co-operate with the executive of the United Society for that end. The Chairman then called upon Mr. Packwood, the Hon. Secretary of the United Society, who moved the following resolution:—

"That the protection required by the public against incompetent Druggists can only be secured by legal power to subject all candidates for the trade to examination."

Mr. WHITTLES, on seconding this resolution, said that the onerous duties of Chemists as dispensers of medicines (using the term in its broadest sense), demanded a relaxation of the fear and dread which at present oppressed them. He believed that a Charter of Incorporation would enable them to pursue their vocation with more satisfaction and protection to the public and more credit to themselves. With respect to the

standard of examination for all future chemists and druggists, he would have it practical, neither too high or expensive to be unattainable, nor too low so as to be unappreciated.

Mr. R. G. JONES, of Stourbridge, moved, "That to exercise the power to subject all future chemists to examination, the trade should be incorporated with a government of their own choice." He said there could not be two opinions as to the desirability of the resolution he had the honour to move, especially in the town of Birmingham, where no one relished the idea of taxation without representation. The Pharmaceutical Society, as an institution for high attainment in pharmacy, might be very good, especially for the *élite* of the trade, but for the purposes of the general trade of a chemist and druggist it was practically useless, and after the repeated overtures of the United Society to the Pharmaceutical Society to co-operate with them, and the courtesy (to say the least of it) evinced by the Pharmaceutical Society, the United Society's wisest plan was, not to look back upon the past, but with firm determined purpose to go forward to achieve their desire, namely the incorporation of the trade. It was difficult for one now in a miscellaneous trade to read up for any examination, but if the trade were closed persons wishing to enter it could not object to passing a proper examination. The status of the trade was low indeed, when in a large town like Birmingham there were men found who would dispense an 8 oz. mixture for 10d. and even 8d. No wonder there was so much apathy in the trade when men could be found thus to prostitute their time and talents.

Mr. WHISTON seconded the resolution.

Mr. LOWE, Hon. Secretary, Wolverhampton, then moved:—

"That the members of this meeting pledge themselves to use what influence they can with members of Parliament and members of the Pharmaceutical Council to secure their aid in getting an Act of Incorporation which shall place all unexamined druggists now in business upon a footing of equality."

Mr. LOWE said he concurred with the previous speakers, and thought great credit was due to the Executive Committee of the United Society for their patient and persevering efforts to induce the Pharmaceutical Council to co-operate with them for the good of the trade. As another effort was to be made, he trusted it would be more successful than the others; but should the Pharmaceutical Council persist in the course they had hitherto adopted, there was nothing left but for the United Society to go to Parliament with a bill for the incorporation of all unincorporated chemists and druggists as a separate body with their own government.

Mr. KEARNES, of Bilston, seconded the resolution, and thoroughly agreed with the observations of Mr. Lowe and other speakers, and should heartily support the Executive Committee of the United Society in their efforts to get the trade incorporated.

Mr. BUOTT, the Secretary of the United Society, being then desired by the chairman to address the meeting in support of the resolution, spoke as follows:—

Before I enter upon the subject of this resolution I feel it incumbent upon me to state that I have been urged by several members in the district to give some explanation at this meeting of the discussions in the late Executive Committee; and if I so far comply with their request as to mention the subject, it is not to explain anything from my own point of view, but to declare my determination to be neither encouraged nor provoked into a controversy in relation to it. If I can in my own person suffer the penalty of whatever wrong has been done, let me bear it; but I entreat you to assist me in healing the wounds of our Society. My daily association with it through its trials, its progress, and its triumphs, combined with an undying faith in its ultimate success, has created within me an unselfish love for it, which no sense of ingratitude or injustice can extinguish, and which prompts me to bear in silence the wrongs I feel rather than to vindicate myself by contention. I come here, not to justify myself, neither do I condemn others. I want bygones to be bygones. I wish to forgive as I hope to be forgiven; and I rely upon my past services and sacrifices and my success in your cause, to vindicate me when the passions and strife in the struggle for incorporation shall have passed away. It is now nearly three years since I met at your district meeting. During that time many have been the conquests of the United Society for their unincorporated brethren. Its first great victory was the defeat of the Medical Bill, which threatened to put the incorporated Chemists and Druggists under the supervision of the doctors. Then came the defeat of the Pharmacy Bill, which would have placed them under the control and tribute of another powerful body, without giving them any voice in the management of their own affairs. We have also prepared and presented a Bill to Parliament, the principle of which has had the sanction of a Select Committee of the House of Commons to give to every unincorporated Chemist and Druggist in the kingdom the right which the Pharmacy Bill denied him, viz., the right to vote in the election of the governing body of the trade; and when the dissolution of Parliament took place, we stood before the country a recognized, united, and powerful society, prepared by the battle we had fought and won to consummate our triumphs by the incorporation of the trade. Now let us inquire,

What is this incorporation which we covet so much? A corporate body is supposed to have special duties to perform for the public, and special privileges to enjoy in consideration of the performance of such duties. What are the duties which chemists and druggists have to perform to the public? I know of no body of men whose duties are so difficult and so responsible. They are fearful to contemplate. Chemists and druggists have the lives and health of their fellow-creatures in their own hands daily. A mistaken bottle or label, an erroneous reading of a prescription, a lapse of memory, or half a grain of poison too much, may precipitate a fellow being into eternity, with consequent family loss and lamentation, and plunge the unfortunate dispenser into ruin and disgrace. But these are by no means all his responsibilities: in the exigencies of human life circumstances are almost daily occurring which devolve upon the dispenser the duties of the surgeon and physician too; and, I may add also, those of the poor man or woman's adviser and friend. Men of ordinary occupations may learn their trades with an ordinary amount of education and attention; but such a chemist and druggist as the public service now requires can only qualify himself by education. He must know something of the elements of botany and chemistry; he must be a tolerable classical scholar; Latin is an absolute necessity to him; and the more he knows of Greek the better. The Pharmacopœia and Materia Medica is a lifelong study, ever varying and increasing with the progress of medical science. To all this must come the practical and experimental knowledge which the counter and the laboratory can only impart. Such are the formidable duties and responsibilities of chemists and druggists to the public. What are the privileges they may reasonably require from the public in return? The first and most obvious privilege they require is to be exempt from jury and every other service which may impair the efficiency of their professional duty to the public. The second privilege is that their examined members may share with the Apothecaries the appointments in the dispensing departments of the army and navy. The third privilege which is necessary to the efficiency of their public service is to be able to say to all future candidates for the trade, Submit yourselves to examination. If you possess such a knowledge of the duties of a chemist as will in the judgment of our examiners constitute a security to the public against the fatalities and accidents which may arise from incompetence, we will admit you. The last and most important privilege, as a condition that chemists and druggists shall serve the public efficiently, is the right to self-government, that is, the right to nominate or to be nominated upon a council which shall have power to make laws for them and to impose tribute upon them. There is something so essentially English, so constitutional, so just in this proposal, that I do not think there is a single individual in this assembly that could or would object to it, and I will pass by it as a self-evident proposition; but there is, by those who oppose it elsewhere, an ingenious commentary put upon it, which requires special attention. "Why," say they, "should you outside chemists trouble yourselves about this matter? We have abandoned that registration fee business; we see it would be offensive to you, therefore we shall let you alone." That is kind, truly! But if you unincorporated chemists and druggists, at whose expense the United Society of Chemists and Druggists was formed for the protection and incorporation of the trade—if you, unincorporated though you are, who first responded to the public demand for protection against ignorance in dispensing medicines,—if you, through whose public spirit a bill was brought into Parliament to remedy that evil,—if you, who have exerted from the Legislature a recognition of your right to self-government,—if you, the unincorporated chemists and druggists in business,—you, the fathers and masters of the very youths of the rising generation who are to be the marrow, and bone, and sinew of the great in-tintion which is to include all future chemists and druggists,—if you will be content to be put on one side as useless, to have no part or parcel in this work of regeneration, to stand on the outside of the Arcana created by your own zeal and money, then you will deserve to be degraded to the rank of men who are tolerated in their trade, whilst they live only to make room for better men when they die. The question now comes, How are we to secure that incorporation which alone can satisfy the public and elevate and benefit the trade? There are two ways to do it. The first is by amalgamation with the Pharmaceutical Society. Notwithstanding that some sophistry has been used to show a difference, amalgamation and incorporation mean the same thing, when understood in relation to the wants and wishes of the trade; for if amalgamation is over to take place, the Pharmaceutical Society must secure the support of the outside chemists in obtaining an Act of Parliament for that purpose, and I believe the more intelligent and liberal members of the Pharmaceutical Society go with me to that extent. What do we ask for but that all examined chemists may be put upon an equality, and have an equal right to nominate or be nominated upon the Council? If that be the case, let the Pharmaceutical Council co-operate with the Executive Committee of the United Society, and without any meeting in London or elsewhere, the requisite Bill may be obtained, because the unincorporated chemists have already declared their readiness. But, if the Pharmaceutical Society mean something less than such an amalgamation,—something which will withhold the right of election or nomination upon the Council from incoming members, or give to the unexamined members of the Pharmaceutical Society distinction or privilege before the public over their examined brethren, then you may expect any bill for such a purpose to come to grief. Should our efforts fail to obtain incorporation by means of amalgamation, we have in our own Society just the kind of organization for the purpose. The utter helplessness of individuals or single towns for a political object has been demonstrated so often that it needs no illustration; but the just claims of the unincorporated chemists and druggists of Bristol, Birmingham, Dudley, Wolverhampton, Manchester, Liverpool, Bradford, Leeds, Sheffield, Hull, and a hundred other towns proclaimed from those industrial centres through their representatives in Parliament, constitute a power which neither Government nor the Legislature can resist. But you must help yourselves; every man must do his duty; every hand must be at the work. Prove by your energy, determination, and zeal that you deserve incorporation, and those who have hitherto despised and resisted your claim will yield it to you because you deserve it.

Mr. BIRD, M.P.S., gave the meeting an amusing account of his observations amongst the chemists on the continent. He considered the chemists in England as superior to them. He recommended energy and industry as the only means to secure a good trade, and eulogized the Pharmaceutical Society

for the exertions they had made to elevate the condition of chemists and druggists.

Mr. THOMAS, M.P.S., and other gentlemen also addressed the meeting. The chairman then put the resolution to the vote, when it was carried unanimously (as were the two previous resolutions) amidst the cheers of the meeting. A vote of thanks was given to the Executive Committee for their zealous attention to the interests of the society, and Mr. Buott acknowledged the good wishes of the meeting on their behalf. The chairman was finally thanked for his kind and efficient service in conducting the meeting, which was considered one of the most agreeable and important yet held by the chemists and druggists of Birmingham in demonstration of their views upon questions affecting the interests of their trade.

MEETING AT HANLEY.

The following report comes to us from Mr. T. Newbold, of Longton:—

A meeting of the United Society of Chemists and Druggists took place at the Saracen's Head, Hanley, on the 2nd inst. Mr. C. Buott, who attended as the secretary of the London Society, and the following gentlemen were present:—Messrs. Oulton, Forrester, Holmes, Goulton, Mercer, Bennett, Brown, Weston, etc.

Mr. FORRESTER, who was voted to the chair, opened the meeting by introducing Mr. Buott, as secretary to the United Society in London.

Mr. Buott said he had not attended that meeting to make a long speech, but to be a recipient of their opinions; nevertheless, he would gladly explain any proceedings, or answer any questions relating to subjects with which they might not be familiar.

Mr. GOULTON wished to know whether they had any danger to fear from the action of the so-called Pharmaceutical conference, and who constituted this body? Whether a better feeling was being brought about between the two societies, and what was the origin of the ill-feeling that had so long existed?

Mr. BUOTT, in reply, said, that although a good deal of gossip had taken place at the meetings of this Conference body, it had no weight with it; but its future actions would be narrowly watched. Its members were, generally speaking, the odds and ends, making a great noise in the conference, but very harmless up to this time, when out. A gradual improvement was visible in the relation of the two Societies. The only reason he could assign for the ill-feeling which did exist, was that the Pharmaceutical Society considered that the United chemists had no right to try to get a bill of their own, but ought to have remained quiet and have seen what it would have done for them.

Other questions of minor importance were asked, and ably answered by Mr. Buott.

Mr. BLACKSHAW, a pharmaceutical chemist, said he considered these meetings would not be productive of much good, or calculated to develop a better feeling between the two Societies, if attacks were made upon such pharmacists as did attend. For his own part, he felt very friendly towards the United Society, and should not oppose anything for their mutual benefit.

Mr. BUOTT replied by saying, that really Mr. Blackshaw could not construe anything said up to this time into an attack upon the Pharmaceutical Society. He (Mr. Buott) would not like to hear anything said, nor would he say anything either at this or any other meeting, calculated to wound the feelings of any member of that Society. He would like to see the two bodies become one great and important Society. Many allusions would necessarily be made to the actions of the Pharmaceutical Society by the speakers, but they ought not to be looked upon as unfriendly.

Mr. MERCER rose and said:—

The subject for our consideration this afternoon is the desirability of incorporating the unincorporated chemists—a subject which has already been made pretty well known by the indefatigable secretary to the United Society of Chemists, Mr. Buott, whom all here have the pleasure this day to meet. It is to each of our individual interests that we at once give our support to this incorporating project. We know that unity is strength; with unity of action we shall be able to secure at the next meeting of Parliament the best possible measure for the benefit of the Chemists and Druggists; and what is of equal importance, we shall be able to scatter to the four winds for ever, any future unbecoming and monstrous interference, such as we have before witnessed, from the Medical Council, prompted by the Pharmaceutical Society. We have hitherto been sadly too quiet, and quite blind to our own interests. We should certainly refuse any protection offered to us by the Medical Pro-

fession, or their colleagues the Pharmaceutical Society, who conjointly wish to manage our affairs for us, considering we are not competent to do so ourselves. We prefer minding, watching, and managing our own business, feeling quite equal to the task, we shall therefore insist upon the right of self-government, and having secured this and our other rights and privileges, we shall be able to place chemistry on a hotter and more sound footing. We must all put our shoulders to the wheel in earnest. We must be up and doing, we must not trifle with the matter by being dilatory, but bear in mind the quotation which one of our most energetic members used when he considered the unincorporated wanted spurring up and brought to a true sense of their real position, "That the hand of the diligent shall have rule, but the slothful shall be under tribute." Then, unless we wish to become subordinates, we must show that the Pottery towns are not behind Liverpool, Birmingham, Leeds, or Hull, and, in concert with them, use our instrumentality, which must secure by our support and united action, for ourselves and our brethren, such a measure as will guarantee to the Chemists and Druggists their undisputed and undisturbed rights, and will give to the public that confidence and assurance which we must now expect them to demand at our hands in these enlightened times, when education, in all classes, is on the quick march with giant strides. If you will glance for one moment at the action of the two Societies and place them side by side, of the Pharmaceutical you will be compelled to say, "So clandestine, auster, and selfish has been their policy, they would have endeavoured, had we not have nipped the project in the bud, to have divided their intended ill-gotten gains, with the Medical Profession, and have sanctioned the expulsion from chemistry of all outside their Society! We dare not leave ourselves in the hands of such a Society to claim for us our rights." On the other hand, we can, in truth, say of the United Society, "So truly liberal and unselfish is their policy, that never have they ceased holding out the right hand of fellowship to all our brethren, even to the very men who had done everything to wrench from them the rights and privileges to which all chemists are equally entitled. We must consider them fair to the whole of the trade, and well worthy of our entire confidence; into their hands we dare trust ourselves, certain that they will well look after our interests." Now is the accepted time to sympathise and assist the executive committee of the United Society, who have up to now borne alone the burden and heat of the day, and have brought our affairs to the same healthy stage in which they remain. Most unfair would it be to share the Society's triumph when all is perfectly smooth; such conduct would be most mean and contemptible, not worthy the name of our profession. They have done enough for us already to prove they have our interests at heart, and are deserving of every support, yea, more, every success. Then let us make up our minds, one and all, to throw into the United Society our help, and when we go forth to the struggle we know our efforts will be crowned with success.

The speaker, in conclusion, begged to move the following resolution:—

"That any Bill to regulate the profession of the chemist and druggist must place all those, now in business, who are unexamined, upon a footing of equality, to produce a permanent and satisfactory settlement."

The resolution having been seconded by Mr. OULTON, was carried unanimously.

The following resolution, proposed by Mr. GOULTON, and seconded by Mr. G. BROWN, was also carried unanimously:—

"That the chemists and druggists now present, declare their determination to oppose any measure in Parliament which does not give equal rights and self-government to the profession."

It was proposed, seconded, and carried:—

"That Hanley and neighbouring towns constitute a district of the United Society of Chemists and Druggists, and that Mr. Holmes be the chairman, and Mr. MERCER secretary of the district."

The next resolution, proposed by Mr. HOLMES, seconded by Mr. BROWN, and carried unanimously, was to the effect:—

"That this meeting wish to have conveyed to the Executive Committee of the Parent Society their very best thanks, for the ability, energy, and prompt action displayed by them, and for the masterly way in which they have managed affairs up to the present point, when from the commencement they were surrounded by the most intricate difficulties; and respectfully urge of them to pursue with renewed energy and determination the rights of the profession."

Mr. OULTON proposed, Mr. GOULD seconded, and the meeting unanimously passed a vote of thanks to Mr. Buott, for his kindness and condescension in coming forward to explain the past and present policy of the United Society, and impart other useful information. Those present wished to express their unlimited confidence in him, and considered themselves very fortunate in being able to have the use of his great mind in conducting their important business.

Mr. BUOTT briefly thanked the meeting, and proposed a vote of thanks to Mr. BLACKSHAW for kindly representing the Pharmaceutical Society at that meeting. He hoped Mr. BLACKSHAW did not mistake energetic speaking for angry remarks, and felt sure all said at the meeting was with all good feeling. The resolution was seconded by Mr. MERCER, and carried unanimously.

Mr. BLACKSHAW having responded, a vote of thanks to the chairman for conducting the meeting, closed the proceedings.

The following declarations have also been forwarded to us for publication:—

DUDLEY.

The undersigned chemists and druggists of Dudley consider the incorporation of the trade with equal rights as the essential object of the United Society, and hereby record their satisfaction with the resolutions adopted by the Executive Committee as the basis of their action to secure such incorporation; and they further declare their earnest intention to aid the Executive Committee in their well-directed efforts for that object, by applying to their representative in Parliament for his support.

GEORGE BAGOTT, Alderman,
THOMAS MORRIS,
EPAPHRODITUS DUNN,
ELI GOULD.

GEORGE WHITE,
ROBERT OAKLEY,
WILLIAM LONG,

TIPTON, DARLASTON, AND BILSTON.

We, Chemists and Druggists of Tipton, Darlaston, and Bilston, declare our attachment to the United Society of Chemists and Druggists, and our faith in that institution to achieve the incorporation of the trade. We deprecate disunion as suicidal; we approve of the peaceful but progressive policy of the Executive Committee; and we believe and trust that if the members of the Society will aid and encourage the Executive, the much wished for incorporation will be an accomplished fact as soon as the attention of the legislature can be directed to the question.

ROBT. H. KEARNES,
THOS. II. HICKMAN,
GEORGE LLOYD,
THOMAS J. BAGLEY,
WILLIAM FIRTH,
WM. BUNTING DIXON,

ADAM LAWTON,
EDWARD HARTLAND,
STEPHEN H. HIPKINS,
T. SIMMITT NIGHTINGALE,
WILLIAM SIMMERTON,
WILLIAM ELLIS.

WEDNESBURY AND WEST BROMWICH.

The Chemists and Druggists of Wednesbury and West Bromwich are of opinion that no minor consideration should divert the energies of the United Society from the great work of incorporation, so that the public may have the security of competent dispensers; existing chemists and druggists be placed upon a footing of equality; and the trade so elevated and privileged as to encourage qualification and diligence by the hope of reward. They therefore determine to give their support to the Executive Committee of that Society, believing that their efforts are being honestly and zealously directed to secure the much desired boon of incorporation for the trade.

WILLIAM BURCH,
JOSEPH GREEN,
THOMAS HORNER,

WALTER HORTON, JUN.,
JOHN HENRY TOMLINSON,
JOHN SMITHMAN.

WOLVERHAMPTON.

We, the undersigned members of the United Society of Chemists and Druggists of Wolverhampton, declare our determination to uphold our Society by union among ourselves, and by supporting the Executive Committee in their efforts to protect unincorporated chemists and druggists from privileged domination, and to secure for them the equal rights of incorporation. We would at the same time record our approbation of the programme of action as embodied in the resolutions adopted and issued to the trade by the Executive Committee, and our intention, if possible, to secure the support of our borough representatives when the question of our rights shall come before Parliament.

J. J. LLOYD,
WILLIAM STANWAY,
JOSIAH PRATT,
JAMES PARNELL,
THEOPHILUS A. WEDOE,
ROBERT JACKSON,
SAMUEL A. RICHARDS,
ROBERT HENRY LOWE,
J. PARKES COOPER,

OWEN JONES,
R. W. JONES,
JAS. E. LISTER,
CHARLES J. FITTER,
GEO. W. DAVENPORT,
E. T. STANWAY,
J. HOLMES,
JOHN PERKINS,
HENRY P. CRESSWELL.

A VISIT TO A SUSSEX HOP-GARDEN.

"Not rural sights alone, but rural sounds,
Exhilarate the spirit, and restore
The tone of languid nature."—Cowper.

The month of September is generally a favourite part of the year, as the fatiguing heat of the summer sun is beginning to relax into an agreeable warmth more congenial to our feelings. The operation also of harvesting the corn crops has been performed, and the anxiety of many a paterfamilias, respecting a moderately cheap loaf during the ensuing winter, is satisfactorily and happily allayed. The sportsman takes again his dog and gun, and makes sad havoc among the feathered tribes, to amuse his leisure time, to grace his table, and indulge his appetite. But the month of September is a peculiarly interesting and busy season in some of the rural districts of this country. I allude more particularly to the counties of Kent, Sussex, and Surrey, where the cultivation of the hop plant (*Humulus Lupulus*) is carried on to a great extent, and forms one of the most lucrative productions of the agriculturist.

As the eatkins of the hop plant is officinal, and recognised in our *Pharmacopœias*, I think a little information on its growth and treatment may not be uninteresting to those, who perhaps living away from any of the hop districts, are quite unacquainted with its cultivation.

We choose a fine day for our excursion, and accordingly set out, having partaken of a hearty luncheon, and provided ourselves with a pair of old kid gloves, to protect our hands from the effects of the hops, which after long picking, leave a dark brown stain on the skin. We need not walk far from the noiseless business of our country town to reach the object of our wishes, and after walking through a shady lane, and crossing a couple of meadows, we arrive at the scene of action.

The hop plantation, or hop garden, as it is usually called, with its regularly disposed high poles, around which the bines entwine themselves, while the hops hang in graceful clusters therefrom, is a striking and beautiful scene. The pickers are of necessity, varied in every sense of the word, as in the same garden you may find, delegates from the Emerald Isle, bairns from Scotland, and a full complement of English hearts of oak. All ages are represented, from that of the hoary veteran and the comely old dame, even down to the innocent infant asleep near its mother, in a box rudely made for the occasion.

In each garden there is a certain number of men called pole-pullers, who by means of an implement with iron teeth, acting as a lever, lift the heavily laden poles from their earthen sockets, and place them in piles so that the bines may be conveniently stripped by the pickers. The hops, as they are picked, are dropped into a receptacle or bin formed of canvas, secured to a wooden frame, and not much unlike a child's bedstead, except, that the canvas is more loosely nailed to the frame. At stated times a person called a measurer, comes to each bin, and removes most of the hops, giving the picker leaden tallies to indicate the number of bushels picked, or entering the number in a small memorandum book kept by the picker. At the end of the picking, each picker delivers up his tallies or book, and is paid according to the number of bushels he has picked. The price paid the pickers differs according to the year, or the quality or quantity of the crop. Some of the pickers come a long distance from home, a great many from London and its environs, and at the latter end of August, crowds of rough and dirty looking people may be seen thronging the stations on the South Eastern and North Kent Railways, en route to the hop gardens in the country. On their arrival at the station nearest their destination, they are sometimes met by waggons belonging to the tenants or owners of the respective farms on which they are engaged. When they reach the end of their journey they put up tents, and at night the usually quiet and sombre country scenery is illuminated by their large fires, over which they suspend their kettles, and around which they sit and smoke the fragrant weed.

After we have picked a little at several of the bins, we wend our way through the hop garden to the "oast-house," or place where the hops are conveyed after the measurer has put them in bags for removal. The oast is a curiously shaped building, and any one utterly unacquainted with its requirements would indeed be surprised at its appearance. The

shape somewhat resembles two figures 8 put across each other, as it is built in circles called roundels, which meet and are connected in the centre, each having a spiral roof with an opening at the top, over which is placed a revolving screen called a cowl, which, shifting with the wind, prevents an ingress of the same, and facilitates the egress of the fumes from the fires or flues. Some oasts have only one roundel, while others on large farms have more. These roundels vary from eight to eighteen feet in diameter. On entering, we see in the centre of the building several fires burning, not unlike those used in ordinary kilns. These fires are kept supplied by charcoal and Welsh coal, thereby causing little or no smoke, and roll sulphur is occasionally added, in order to give the hops the pale yellow and healthy tinge so much sought after by the brewers of fine ales, such as Messrs. Bass and Allsop are noted for.

After ascending a ladder, we find some men emptying the bags of hops we had just left in the garden, on to a seemingly wooden floor, which we are informed is made of horse hair, in order to let the heat from the several fires penetrate evenly and sufficiently through the hops on the top of it. This hair floor is supported by a framework of wood, strong enough to allow the drier to walk on and turn the hops when necessary; but the sulphurous fumes which pass through them and escape at the top, render that performance very disagreeable. The time the hops require to be subjected to this heat or drying varies from eight to eleven hours, according to their age and ripeness, after which they are taken off and transferred to a cooling room for a short time.

In about two or three hours they are ready for packing, and the process is commenced by stretching the top of one of the pockets, as they are called, on a circular framework in the floor. The hops are now gradually thrown in, and a man gets inside and treads them down as tightly as possible. In some oasts a press is used to compress the hops in the pocket, acting like our tin-ture presses, the screw being propelled and withdrawn by means of a wineh.

After the bag is pressed full, it is taken out of its confinement and sewn up, the weight of it printed on it by means of stencil plates, the grower's name and address having been stamped on the bag previous to filling—the name of the county being particularly plain and truthful, as the price varies with the locality—for example, East Kent hops generally are worth more than West Kent, and Sussex hops less valuable than either, that is to say for proportionate samples. The samples are drawn from the different pockets and forwarded to merchants in London, who offer them for sale.

After having tired ourselves in the packing room, we thank our rustic informants for their courtesy in explaining, and their readiness to answer our numerous questions, we take our leave, and are very glad to be again in the pure country air after such a subjection to the sulphurous influence of an oast-house.

We are told the picking lasts from three to six weeks, according to the productiveness of the year. The hop-driers and pole-pullers are well paid, and the pickers often earn a good round sum, and in fine weather, such as we had in September, 1865, really rather enjoy the change than otherwise; but this year the weather during the picking season was very bad, and detracted from their pleasure and added much to their discomfort.

Hop-growing has of late become a popular source of agriculture, and our continental friends are striving in every way to compete with us, and I believe the French intend holding an exhibition of hops and brewing utensils in order to further their knowledge in this respect.

It is a curious thing how times change; of course we all know a great many English and foreign hops are annually consumed in the process of brewing, and yet (I think I am not in error) in the reign of Henry VIII. a person was arrested on the charge, for that he did wilfully and knowingly use for the purpose of brewing beer a noxious weed, to wit, the hop, which at that early period was a common weed, as we sometimes now see it growing wild in our hedge-rows; but cultivation and attention have brought it to its present beautifully graceful, ornamental, and highly useful state of perfection; and no doubt the majority of our readers enjoy to quaff a draught of that delicious beverage which depends so much upon its prudent admixture. So far as *pharmaeum lupulus* for, and I know of nothing very remarkable either in

the extract or tincture, except that the latter is sometimes very obstinate about becoming clear, even after the infliction of repeated filtrations, and that it is now frequently prescribed in conjunction with carbolic acid as an inhalation in pulmonary affections.

When our curiosity is gratified with regard to the picking, drying, and storing of hops, we start on our homeward walk, and reach the town as the shades of evening draw near, much gratified with our day's amusement. We trust those of our readers who are ignorant of such scenes as we have described will not be disappointed in reading the history of our visit; while those who live in districts like ourselves can, from similar experience, follow us in every line of our rambles.

A. W. SMITH.

Rye, Sussex.
October 25th, 1866.



DR. BENCE JONES ON THE EDUCATION OF PHYSICIANS AND CHEMISTS.

THE following extract from the address delivered by Dr. H. Bence Jones before the Chemical Section of the British Association, cannot fail to interest the readers of this journal:—

"The present higher education for the medical profession consists, shortly, in learning reading, writing, and arithmetic in the first ten years of life. In the second ten years, Latin, Greek, some mathematics or divinity, and perhaps some modern language. In the third ten years, physics, chemistry, botany, anatomy, physiology, and medicine, and perhaps surgery. Looking at the final result that is wanted, namely, the attainment of the power of employing the mechanical, chemical, electrical, and other forces of all things around us for increasing or diminishing the mechanical, chemical, and other actions taking place in the different textures of which our bodies are composed, it is quite clear that the second decennial period is passed without our advancing one step towards the object required; and that in the third decennial period the amount to be learnt is very far beyond what is possible to be attained in the time allowed. If we turn to the lower education, in the first eighteen years of life, reading, writing, and arithmetic, and enough Latin to read and write a prescription, constitute the minimum to be acquired. During the next three years, physics, chemistry, botany, anatomy, physiology, and the practice of medicine, surgery, and midwifery, have all to be learnt, and from this crowding it follows that the study of physiology is begun at the same time as the study of physics and chemistry. In other words, the structure and the foundation are commenced at the same time. The top of the house may be almost finished when part of the foundation has not been begun. What chance is there of any one understanding the action of the chemical, mechanical, and electrical forces in the body, until a fundamental knowledge of chemistry, mechanics and electricity, has been first obtained? What chance has a medical man of regulating the forces in the body by giving or withholding motion, food, or medicine with any reasonable prospect of success, when a preliminary education in these sciences is thought to be of no importance? It seems to me that the only possible way to make the present preliminary education for medical men less suited to the present state of our knowledge, would be to require them to know Hebrew or Aramaic instead of Latin, in order that the origin of some of our words might be better understood, or that prescriptions might be written in one or other of these languages. Let me now, for contrast sake, draw you a picture of a medical education, based upon the smallest amount of classical knowledge, and the greatest amount of natural knowledge which can be obtained. In the first ten or twelve years of life, a first-rate education in the most widely used modern language in the world, English, with writing and arithmetic, might be

acquired, and in the next five or ten years a sound basis of knowledge of physics, chemistry, and botany, with German or French, might be obtained; and in the following five years anatomy, physiology and medicine, surgery and midwifery. If every medical man were thoroughly well educated in the English language, and could explain the nature of the disease and the course to be followed in the most idiomatic and unmistakable English, and if he could use all the forces in nature for the cure or relief of his patient, and if he could, from his knowledge of chemistry and physics, and their application to disease and medicine become the best authority within reach on every question connected with the health and welfare of his neighbours; and if he possessed the power of supervising and directing the druggist in all the analyses and investigations which could be required as to the nature and actions of food and medicines and as to the products of disease, surely the position and power and agreement of medical men would be very different from that which they now obtain by learning some Latin and less Greek. At present, so far from physicians possessing more knowledge of food and of medicine than any other class of persons in the community, the analytical and pharmaceutical chemists are rapidly increasing in knowledge, which will enable them not only to understand fully the nature and uses of food and medicines, but even to detect the first appearances of a multitude of chemical diseases. Their habits of investigation and their knowledge of the nature of the forces acting in the body will gradually lead them to become advisers in all questions regarding the health of the community, and from this they will, like M. Bouchardat, in Paris, become almost, if not altogether, practitioners of medicine. In confirmation of my opinion of the direction in which the treatment of disease is progressing, I may just refer to the cattle-plague, which in 1745 was treated by Dr. Mortimer, at that time Secretary of the Royal Society, and therefore one of the most scientific physicians in the country, with antimony and bleeding. In 1866, two chemists, Dr. Angus Smith and Mr. Crookes, gave the only useful suggestion for combating the disease, namely, by the arrest or the destruction of the poison by chemical agents. There is yet another point of view in which chemists will see the harm that results from our present medical education. The use of Latin in our prescriptions requires that the pharmaceutists should learn at least sufficient Latin to read what we have written. Many errors have arisen and will arise from the dispenser being unable to give the directions rightly. To avoid such mistakes, a portion of the time that ought to be given to the attainment of the highest possible amount of chemical acquirement, and a perfect knowledge of the English language, or some foreign language wherein he might learn the discoveries in chemistry and the improvements in pharmacy of other countries, must be devoted to the learning of Latin, in which the physician writes his directions. All our druggists in England ought to be what they are in Germany and in France, chemists capable of any analysis that might be required of them, and able to satisfy themselves and the medical men that the substances they sell are what they profess to be—pure, unadulterated chemical compounds. No one of my hearers in this Section will consider five years a long time for the acquirement of such knowledge, and until the pharmaceutists all obtain this education, medicine will be subject to a great cause of uncertainty in the variations in the quality and quantity of the different substances which, under the same name, are obtained from different druggists. Before I conclude, I must apologize to some in this Section who may think that this subject is of no interest to them, by reminding them that none but chemists can judge what the worth of chemical education really is; and I am sure that no body of scientific men exist who are so fitted to judge of the necessity of an education in natural knowledge for those who employ the forces around us to regulate the forces within us as the Chemical Section of the British Association. Last year Prof. Miller said, 'It behoves all who are themselves engaged in the pursuit of science to consider in what way they can themselves aid in forwarding the cultivation of natural knowledge.' I ask you, for the good of science, and for your own good, to exert your influence in the first place, and more especially to effect a change in the preliminary education of all those who intend to practise medicine; so that leaving Greek and Latin to be the ornaments and exceptions in their education, they may

have time to obtain the best possible knowledge of the chemical and physical forces with which they have to deal. I urge this because of my conviction that whenever the most perfect knowledge of chemistry and physics becomes the basis of rational medicine, then, and not till then, medicine will obtain the highest place among all the arts that minister to the welfare and happiness of man."

EAST INDIAN QUININE.

The efforts made by the Indian Government to introduce the Cinchona plant in India and Ceylon are detailed in a voluminous blue book lately presented to Parliament. It contains no less than ninety-four reports and letters respecting the efforts made to extend the cultivation of this valuable plant on the Neilgherry Hills, in Wynnaad, Coorg, and Travancore, with a goodly number of reports, showing that the ground has been laid for cinchona cultivation in Sikkim, the Punjab, Bombay, and Ceylon. There is also a very interesting journal by Mr. Cross, who was commissioned by the Indian Government to make a collection of seeds from the cinchona forests near Popejan, in South America.

It appears that in 1861 the Government of Madras desired the Home Government to have an analysis made of the East Indian bark, and a number of specimens were collected and sent over by Mr. McIvor, the superintendent of the Government plantations. Mr. John Elliott Howard, the analyst, in his report, stated, "I have great pleasure in informing you that the result of my examination of the bark of *C. succirubra*, grown in India, is very satisfactory. I have thus far only operated upon 500 grains, proceeding cautiously, as the quantity of bark sent is small. I find exactly the same constituents as in South American 'red bark,' and was able to obtain a first and second crystallization of very white sulphate of quinine mixed (as is usual when obtained from red bark) with sulphate of cinchonidine; I have also obtained some cinchonine. This must be considered very satisfactory, and a promising result when the immature age of the bark is considered" (viz., two years' growth). On this favourable report the superintendent was authorized to sell 100,000 plants, which were all speedily applied for by the native planters. A second collection of samples was sent to Mr. Howard for his report which was still more favourable. He wrote:—

"I have since devoted most careful attention to ascertain by experiment the probable market value, especially of the first two samples of bark sent. It will not be necessary for me to detail the various means by which I succeeded in convincing myself, not only of the existence of the alkaloids, but of their being extant in such a state of purity as is certainly not found in the ordinary samples of red bark imported from South America. The result of my examination tended to show distinctly that cultivation has improved the produce of at least this species of cinchona.

"I must remark that the commercial value of specimens of bark intended for the manufacturers of sulphate of quinine can never be ascertained by the mere knowledge of the percentage of alkaloid soluble in ether, since it is necessary that this should be shown to exist in such a state as to crystallize with acids into the required compounds.

"In the case of No. 1, the bark from the thickest part of the lower branches of a *C. succirubra*, two years and five months old, this examination was most satisfactory, confirming that which I stated in my first report as to the facility with which the alkaloids were obtained in a state of purity, although the amount of red colouring matter in the bark is very great. The amount of purified alkaloids I estimated at 6 per cent., consisting of quinine 3·14, cinchonidine 2·06, cinchonine 0·80. This large product of alkaloids might probably be still further increased by surrounding the stem with moss, in the manner which Mr. McIvor has so happily suggested, since Dr. De Vry found 8·409 per cent. of alkaloids in a stem which had been so treated. It seems to me, from this trial, that the East Indian bark, the produce of *C. succirubra*, will rival in price the Bolivian *Calisaya*, which is by no means the case with the bark of the branches of *C. succirubra*, as grown in South America. It is important to remark, that the very high price of between 8s. and 9s., which has quite recently been paid for red bark in this market, applies only to those pieces of bark from the trunk of the tree which possesses, from their age, a peculiar

bright red appearance. I have forwarded a small vial with commercial sulphate of quinine obtained from this No. 1, as also sulphate of cinchonidine separate from the above. I have only to remark further on this bark, that its appearance bespeaks its good quality, and that there can be no doubt the season chosen (24th of February) is most favourable to its being well secured."

Mr. McIvor, the superintendent of the plantations, appears to have tried the plan of mossing the bark of the plant in order to increase the deposit of the quinine therein, and wished to secure it to himself by patent, but the Government were of opinion that as it was invented in the course of his official duty, it would be a bad precedent to adopt. The experiments made by Mr. Clements Markham proved, however, that the plan was extremely beneficial; he states that a tree two and a half years old yielded alkaloids of 2·43 per cent., but 5·20 when mossed for a year. These results, he states, give us the certainty that the correct method of treating the cinchona trees is to cover the stems with moss, to remove the bark periodically, to renew the bark by mossing the stem, and to allow the tree to continue growing until it attains its utmost size. Dr. De Vry told Mr. Markham that with muriatic acid and caustic soda he treated the green bark and produced a fine powder consisting of all the fibrifuge alkaloids of the bark, which will practically be as efficacious as the expensive sulphate of quinine.

From a return included in the report, it appears that the number of plants on the Neilgherry Hills, which at the beginning of 1863 were a little over 100,000, in May of the present year exceeded 1,100,000. In the other districts mentioned in the list the same activity is manifested. From Ceylon Mr. Markham reports that the coffee growers have taken to the cultivation of the cinchona in a hearty manner, as many as fifty planters having applied for plants, of which 180,000 have been distributed, the manager of a large estate belonging to Rothschild being the foremost amongst them.

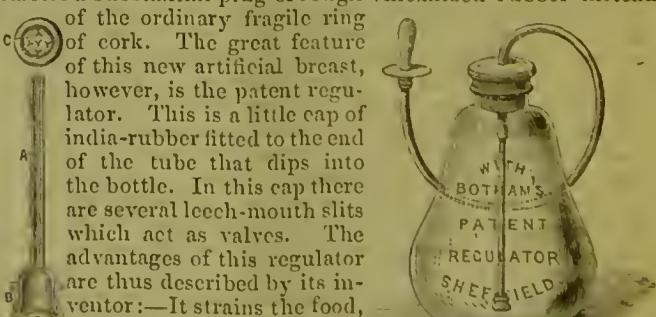
It also appears that Government have ordered new roads to be made especially for the use of the districts in India where this plant is being cultivated, and there can be little doubt that the supply will be greatly increased, as the cultivation of the plant is rapidly extending.



BOTHAM'S IMPROVED FEEDING BOTTLE.

We have much pleasure in calling the attention of our subscribers to a new form of feeding bottle devised by Mr. Botham, of Sheffield, and which is unquestionably the best substitute for the mother's breast yet produced. In every part of this contrivance we recognise the result of much thought. The glass bottle is of a most convenient shape; it may be easily held in the hand, it stands firmly on its base, it rests quietly on its side, and it has no awkward corners or edges. The cap is a massive piece of porcelain, offering no receptacle for sour milk, and the part which enters the bottle carries a substantial plug of rough vulcanized rubber instead

of the ordinary fragile ring of cork. The great feature of this new artificial breast, however, is the patent regulator. This is a little cap of india-rubber fitted to the end of the tube that dips into the bottle. In this cap there are several leech-mouth slits which act as valves. The advantages of this regulator are thus described by its inventor:—It strains the food, preventing the tube from being choked with bits of skin, or other solid substances. It so regulates the food, that however large the hole in the teat may become, the supply of food is always the same, thereby rendering unnecessary the inconvenience of new teats. When the food has passed the regulator it can-



be replaced by a new one without any trouble.

not return into the bottle, and its action is so very simple that the most delicate child may with ease be fed with it. The food easily passes through the regulator, filling the tube, which remains full, thereby precluding the possibility of air entering the stomach, and dispensing with the necessity of the child continually refilling the tube with food, which many delicate and weakly children are unable to do.

We have had the opinion of a very young chemist upon this contrivance, and though it cannot be translated into the language of adults, it is most satisfactory. The application of a perforated cap to the mouth of the inner tube of a feeding bottle may seem a trifling matter, but it really constitutes a most important invention, for it obviates many of the recognised defects of all the ordinary forms of this useful apparatus. Cleaning brushes are supplied with the bottles, and the boxes in which they are packed are tastefully got up. We may mention that those lucky infants who are born with silver spoons in their mouths, can be supplied with bottles having silver fittings.



BOOK RECEIVED. Professor Frankland's "Lecture Notes for Chemical Students: embracing Mineral and Organic Chemistry" (Van Voorst, 12s.) This systematic outline of modern theoretical chemistry will be reviewed at some length in our next.

CHEMISTRY OF THE PHARMACOPEIA. In consequence of the press of important matter we are compelled to keep the ninth article of this series until next month.

G. W. (Blackfriars Road). We cannot suggest any improvement on the process you now adopt, but we will make further enquiries among our practical friends.

"Legality" (Wolverhampton). The labels would not render the articles liable to stamp duty according to the usual interpretation of the Act. The handbill might not be regarded as an advertisement recommending the remedy, but its publication would certainly be opposed to the spirit of the law. We are quite sure that a recommendation "to try" a medicine would render the medicine sold liable to duty.

"Enquirer" (Landport). Palm oil is bleached by several processes, viz.: by the action of chloride of lime; by the action of nascent oxygen derived from peroxide of manganese and sulphuric acid, or bichromate of potash and sulphuric acid; and by heating the oil in a close vessel to 230° F. by means of high-pressure steam, or to 212° in open vessels so that it may be exposed to the action of light and air. The method of bleaching with the bichromate and sulphuric acid is the most expeditious one.

J. H. (Notting Hill).—The following formula has been supplied to us:—

NERVINE BALSM.

'Take of Beef Marrow,
" Expressed Oil of Mace, of each, ʒiij.
" Balsam of Tolu, ʒij.
" Oil of Clove,
" Camphor, of each, ʒi.
" Rectified Spirit, ʒss.
Mix.

W. C.

GAZETTE.

BANKRUPTS.

AMES, WILLIAM JOHN, Cannon-street-road, St. George's-in-the-East, ginger-beer manufacturer.
BUTT, JOHN, Lincoln, chemist.
HIRST, J. B., Lower George-street, Chelsea, mineral water manufacturer.
LEIGH, G. E., Penistone, Yorkshire, surgeon.
PATERSON, WILLIAM, Brant Broughton, Lincolnshire, surgeon.
SMITH, EDWARD, Norwich, physician.
SOOLE, J. H., Grays, Essex, assistant to a chemist.
STEEL, J. S., Wallasey, Cheshire, doctor in medicine.

PARTNERSHIPS DISSOLVED.

ARMITAGE and ROBINSON, Leeds, glass bottle manufacturers.
BROWN, R., M.D., and ALDERSEY, W. H., Cliftonville, Sussex, surgeons.
CARTER and METCALFE, Shotfield, manufacturing chemists.
LAWRENCE, J., and IRWIN, H. R., Birmingham, surgeons.
MARTIN, J., and SON, Park-street, Redland, Bristol, chemists and druggists.
PERKINS, W., and DOVE, G., Alverstoke, manufacturers of soda water.
PRIOR and SON, St. Ives, Huntingdonshire, chemists.
RAYNER, Dr. J., and HEWITT, Dr. W., Kingsland-crescent, Hackney, surgeons.
RONSON and PEELE, Durham, chemists.
SERCOMBE, E., and STEVENSON, N., Brook-street, Hanover-square, surgeon dentists.

SCOTCH SEQUESTRATION.

M'GILLIVRAY, G. H., Dundee, druggist.

APOTHECARIES HALL.—At the competitive examination on the 17th and 19th of October, for the prizes in *materia medica* and pharmaceutical chemistry, annually given by the Society of Apothecaries, the successful candidates were—first, Albert Henry Baines, Guy's Hospital, a gold medal; second, James Goodridge Anderson, St. Mary's Hospital, a silver medal and a book.

MEDICAL LOYALTY.—A correspondent of the *Lancet* quotes from a recent number of *Notes and Queries* the following strong argument in favour of the loyalty of physicians:—

Question—"Can you explain to me

Why all physicians take
A guinea for their fee,
When we no guineas make?"

Answer—"Oh, yes! the reason's plain:
They are loyal, and unwilling
That a sovereign e'er again
Should be left without a shilling."

A POTENT PRESCRIPTION.—Dr. John Brown in his delightful book "*Horæ Subsecivæ*," gives the following instructive case:—Many years ago, a countryman called on a physician in York. He was in the depths of dyspeptic despair, as often happens with the chawbacons. The doctor gave him some plain advice as to his food, making a thorough change, and ended by writing a prescription for some tonic, saying, "Take that, and come back in a fortnight." In ten days Giles came in, blooming and happy, quite well. The doctor was delighted, and not a little proud of his skill. He asked to see what he had given him. Giles said he hadn't got it. "Where was it?" "I took it, sir." "Took it! What have you done with the prescription?" "I ate it, sir. You told me to *take it!*" The author adds: "I once told this little story to a homœopathic friend, adding, 'Perhaps you think the iron in the ink may be credited with the cure?' 'Well,' said my much-believing friend, 'there is no saying; perhaps it may have contributed to the cure.'" A good illustration this of the importance of diet, and of the homœopath's credulity in the matter of infinitesimal doses. A good illustration, too, of this important principle of therapeutics, that to discover and then to avoid the cause of a disease is a better and a more successful practice than to prescribe remedies for symptoms.—Dr. George Johnson.

A VESTIGE OF MEDIEVAL PHARMACY.—At an inquest held on the 5th instant at Bradwell, Bucks, before Mr. Worley, the district coroner, on the body of Elizabeth Walters, a child aged five years, and who died from hydrophobia, evidence was given of a practice almost incredible in a civilized country in the 19th century. A witness, Sarah Mackness, stated—"I live at Bradwell, and am wife of Thomas Mackness, a farm labourer. I saw the deceased child after it was bitten by the dog, which was about nine weeks back, and was requested by the father of the child to give her some of the liver of the dog, and he was to get some from the dog, which had then been killed and buried. I accordingly went to the house—it was either the day after the child was bitten or the next day. The mother cut off a piece of the liver, weighing about an ounce, or an ounce and a half. I frizzled it before the fire on a fork for some minutes, till it was well cooked and dried up, and then gave it to the child, with some bread. She ate it freely, about two mouthfuls, and had some warm tea after it." The grandfather and parents of the child were anxious for the liver to be given, thinking it would prevent the bite of the mad dog taking effect, as formerly an uncle of the child had escaped hydrophobia after having been bitten, and having taken some of the liver of the dog which bit him. In that case, it is stated, the carcass of the dog had been in the water nine days before the liver was taken out.



LONDON, NOVEMBER 15, 1866.

NOTICE TO SUBSCRIBERS AND ADVERTISERS.

CORRESPONDENCE.—All communications should be addressed to the Editor, at 24, BOW-LANE, E.C.; those intended for publication should be accompanied by the real names and addresses of the writers.

QUERIES.—The Editor cannot undertake to attend to those which are anonymous, or to send answers through the post.

SUBSCRIPTION.—The subscription to the CHEMIST AND DRUGGIST is 5s. per annum, payable in advance. Should a receipt be required, a stamped envelope must be sent with the amount of subscription. A specimen number may be had upon application, price 6d.

POST OFFICE ORDERS.—Post-Office Orders to be made payable at the General Post Office to the Publisher, WILLIAM CANNING, who is alone authorized to receive accounts.

SCALE OF CHARGES FOR ADVERTISEMENTS.

	£ S. D.
One Page	4 0 0
Half ditto	2 10 0
Quarter ditto	1 10 0

Special Rates for Wrapper, and the pages preceding and following literary matter.

The above Scale of Charges will be subject to a discount of 10 per cent. upon Six, and 20 per cent. upon Twelve insertions—if paid in advance.

Seven Lines and under 0 4 6

Every additional Line 0 0 6

Advertisements of Assistants Wanting Situations (not exceeding 12 words) inserted at a nominal charge of 1s. each.

The CHEMIST AND DRUGGIST is published on the Fifteenth of every month, except when that date falls upon a Sunday, when it is published on the preceding day. It is regularly supplied direct to the Members of the Trade in Great Britain, Ireland, the Colonies, and all the principal seats of foreign commerce.

Everything intended for insertion in the current Month must be sent in before the 10th, except Employers' and Assistants' Advertisements, which will be received until 9 A.M. on the morning previous to publication.

CONCILIATORY PROCEEDINGS.

In words that have the true ring of earnestness, our estimable correspondent, Mr. A. W. SMITH, of Rye, commends, by turns, the manifesto of the new Executive of the United Society, the work of the British Pharmaceutical Conference, the counsel of Mr. WADE, and the energy of Mr. BUOTT. He sees good in everything, and doubtless ascribes the recent unfortunate trade dissensions to the conflict of various benevolent purposes. He trusts that the storm-beaten craft called the United Society is now in calm water, steadily making for the haven of Incorporation, and that the course is clear of quicksands and sunken rocks. He entreats us to support the working crew, though he reminds us that they have yet to prove themselves worthy successors of the honest fellows who were so ruthlessly thrown overboard.

We wish we could think with Mr. SMITH that the halcyon days of the United Society had come at last, and we wish we could give the present Executive that hearty support which is based on thorough confidence. Most of the members of this Executive are gentlemen of unquestionable integrity and ability, and we are sorry we cannot always fight on their side. They have passed many excellent resolutions, and have already done much to reform the government of the Society. Why then do we stand aloof from them?

We do not care to be the organ of a Committee that sanctions the publication of misstatements respecting important sections of the trade or profession from which we take our name. We earnestly desire to see all the chemists and druggists of Great Britain incorporated under an Act of Parliament, but we must condemn the violent declamation and absurd exaggeration by which the United Society's project is sustained. There can be little doubt that the result of any legislative act will be the fusion of all sections of the profession into one body, and in our opinion whatever

tends to keep these sections apart is deplorable. Our correspondent "PHARMACOPOLA" gives good counsel upon this subject.

The policy of the present Executive is said to be conciliatory, but if the orators of the Hanley meeting faithfully carried out this policy, we do not envy the unfortunate pharmacists who are to be conciliated. Poor Mr. BLACKSHAW, who got a vote of thanks at the close of the meeting for kindly representing the Pharmaceutical Society, must have felt rather uncomfortable while Mr. MERCER was conciliating him by remarks on the "clandestine, austere, and selfish policy" of the pharmacists, and their intention to divide their "ill-gotten gains" with the doctors. Indeed, Mr. MERCER's speech brings to mind Hood's account of the butcher who was recommended by a bystander to try conciliation :—

"Stringing his nerves like flint,
The sturdy butcher seized upon the hint,—
At least, he seized upon the foremost wether,—
And hugg'd, and hugg'd, and tugg'd him neck and crop,
Just *nolens volens* thro' the open s-hop—
If tails come off he didn't care a feather—
Then walking to the door, and smiling grim,
He rubbed his forehead and his sleeve together—
'There!—I've conciliated him!'"

But the most remarkable instance of conciliation at the Hanley meeting was Mr. BUOTT's criticism on the British Pharmaceutical Conference. "Its members," he said, "were generally speaking, the odds and ends, making a great noise in the Conference, but very harmless up to this time, when out." Now as the list of members of the Conference includes the names of the Presidents of the United and Pharmaceutical Societies, and those of most scientific chemists and pharmacists, Mr. BUOTT's general definition of the members as "odds and ends" was obviously unwarranted misrepresentation. When the paid agent of the Executive of the United Society ventures to sneer at a neutral association established for the encouragement of pharmaceutical research, we may reasonably question his fitness for the delicate office of conciliator.

The bad taste which characterised much that was said at the pottery town was avoided by the speakers at the important meeting held at Birmingham. Five of these speakers represented the "odds and ends" of the Conference, and two of them were members of the Pharmaceutical Society. Mr. BUOTT's speech, which is printed at length in another column, is remarkably moderate, and sets the advantages of incorporation in a good light. We would call attention, however, to one statement contained in it which appears to us to need correction. Mr. BUOTT says that the principle of the United Society's Bill "to give to every unincorporated chemist and druggist in the kingdom the right to vote in the election of the governing body of the trade," "has had the sanction of a select committee of the House of Commons;" but in the published minutes of this committee we cannot find any reference to the right of voting. The only principle which the committee did sanction was the restriction of the sale of certain dangerous drugs to properly qualified persons. Their first resolution to the effect that no compulsory examination or registration would be required of chemists now in business, was opposed to the essential feature of the Society's project of incorporation.

In conclusion, we urge the gentlemen constituting the Executive Committee of the United Society to trust to the natural strength of the cause which they uphold, and to condemn the use of certain parrot-cries at the meetings called in their name. Let them show their professional brethren that their policy is really conciliatory.

UNITED ETHICS.

LET the profession and the trade shake hands. Can any intelligent man, who gains his living by the pursuit of pharmacy, assign any cause or just impediment why these two should not be joined together?

M. Fumouze, some years ago (1863), proposed that pharmacy and medicine should be studied under the same college roof, in fact, that there should be a fusion between the separate schools. This will never do, nor can any good result be anticipated from such an arrangement. The secret of successful union may be expressed in the following formula:—One Purpose; Separate Work.

The Paris Codex of 1866 has practically embodied this idea; it has been issued under the direction of an editorial committee, composed of officials of the School of Medicine, and of recognised pharmaciens. The president, M. Dumas, seven members of the medical profession, two Government officers, and eight pharmaciens, constitute the Commission. Amongst the latter, occur the names of Bussy, Guibourt, and Mialhe. No greater compliment has yet been paid to pharmacy. We invite the serious attention of the reader to some passages in the preface. Let him not hesitate to draw information from foreign sources; rather let him acclimatize whatever flowers of knowledge he may chance to encounter on his path.

"A codex, that is a pharmacopœia, should be the last expression of the teaching of the schools.

"Just in proportion as complex formulæ, the legacy of ancient medicine to modern times, are simplified, or given up, the question arises whether a codex, or pharmacopœia, must not inevitably become one day a useless compendium; whether the laboratory will be always necessary, and whether the pharmaciens himself could not be replaced by a mere vendor of drugs. We may assert, that were this ever to be the case, no enlightened mind would witness without sorrow the disappearance of a liberal profession, to which belongs the credit of having long ago transformed modern chemistry; for it has founded and perpetuated chemical instruction; created the old methods of experiment and original apparatus; amongst his ranks Scheele, Vanquelin, Davy, Pelletier, and Robiquet may be enumerated; while it can claim the distinguished honour of having been the teacher of Lavoisier.

"But every day's experience demonstrates, that just in proportion as the number of powerful remedies is increased,—as they are purer, more concentrated, or stronger, it becomes the more necessary that the pharmaciens who is responsible for their preparation, preservation, manipulation, and dose (?), should be educationally qualified (instructed), careful and exact. Quand la responsabilité s'élève il faut que les lumières s'accroissent en étendue, et en intensité. To what dangers would not families be exposed, if the pharmaciens did not know that the name chloride of mercury might indicate a violent poison or an innocent purgative, and that there is nothing in common between the chloride and cyanide of potassium, so easily mistaken by the public. The pharmaciens, let us say, requires a wider and deeper range of study in proportion as the progress of therapeutics places in his hands remedies more numerous, more powerful, more liable to change, or more easily adulterated, in regard to which, the least mistake would endanger the life of the patient, and the slightest modification might betray the hope of the physician.

"At a time when this idea is penetrating England itself (enlightened by those errors which increase under its very eyes, and by the infinite evils they involve), is not certainly the moment France should choose to abandon a conviction which she has ever hitherto maintained. The work which the Commission has undertaken has been both long and wearisome; but it has been at once abbreviated and made more sure by the researches made by the Pharmaceutical Society of Paris with regard to the improvement of the Codex text. Our duty is first of all to offer it our sincere

thanks, and to acknowledge the full advantage we have derived from the numerous experiments it has undertaken. But our duty is also to tell that Society that it remains for it to follow up and complete an examination, which will never attain its end until every European State has, by common consent, adopted its recommendations."

We dare not print these sentiments were it not in the power of every practical worker in pharmacy to ascertain the correctness of the extracts. The theory, therefore, of united ethics is considered neither absurd nor impossible in France. Bear with the writer while, for a few moments, something is said respecting English pharmacy.

The *Lancet*, our first authority in journal medical literature, observes:—"These views (oneness of ethics) with regard to the future, are worthy of acceptance at the hands of our brethren. That they are not Utopian we are fain to believe, but much must be done, both with respect to the medical profession and pharmaceutical chemists, before they can be carried into practice. Our grievance is against the 'counter-practice' of a phalanx of half-educated or wholly uneducated shop-keeping druggists who prescribe for numberless cases of disease amongst the poor. The qualified practitioner of the present day finds a remedy for such abuse in the opening of a 'retail.' That the sale of drugs, scented soap, and tooth-brushes is derogatory to the members of a learned profession, must be admitted. The profession of medicine it has been said, by one whose opinion is entitled to the highest respect, is either a noble calling or a low trade."

Dr. Aveling, in his introductory address before the Sheffield School of Medicine, makes the following remarks:—

"There is a great deal of prescribing going on over the counter; and in the little back room not unimportant surgical operations are sometimes performed. I am inclined to think that our most formidable rivals are to be found behind the coloured bottles of the drug shop. The president of the Pharmaceutical Conference, held two years since at Bath, said, 'Rich and poor of all grades do not hesitate to consult them in all sorts of difficulties, and obtain freely and gratuitously that for which a physician or consulting chemist would charge a handsome fee.' Now it has been said with regard to this practice, that if the general practitioner would give up dispensing his own medicines the druggist would give up prescribing. I doubt this very much. For the last ten years, although practising as a general practitioner, my patients have always received from me a prescription, and have had to send to their own druggist for the medicine. I pledge you my word, gentlemen, that there has been no reciprocation on the part of druggists. No string of patients is to be seen thronging my door, sent by druggists as a token of their appreciation of the method I have adopted. When I go into their shops to write a prescription, or order medicine, I still hear the long list of complaints being poured forth, and on one occasion, which I shall never forget, I heard a bold elderly matron detailing to a young apprentice symptoms of a most delicate nature, and gravely asking his advice. Is it to be wondered at, that these young men should in time gain great confidence in their medical knowledge?"

Here is the rock on which United Ethics split, the physician in our judgment has good cause to make complaint.

It is not the grand advance made lately in the education of the druggist of which the Profession is afraid. Let him be an adept in chemistry, or skilled in pharmacy. Let him delight in botany and in the higher branches of his calling; let him have such an amount of cultivation as would render him honourably competent to fill the professor's chair, and not one shade of jealousy will exist. On the contrary, respect will attend his ever advancing footsteps; the higher he rises, the less will be apprehended on his part any interference with mysteries with which he is necessarily unacquainted. What is dreaded?

The neat young man, *audax omnia perpeti*, who, with no qualification but egregious vanity, and with no diploma but sheer impudence, will treat with equal self-confidence, con-

sumption or a cough; the last stage of typhus and a cold. Till this smirking individual is entombed, medicine and pharmacy are likely to be at daggers drawn. But it has been remonstrated already whilst reading these remarks: the druggist will give up medicine the day the profession will give up the shop. What was the origin of this last dreary institution? What drove the surgeon to so dire a pass? Had we all sufficient money how many difficulties would be removed. Necessity, if it have no laws, entails most heavy penalties. The young professional has finished his educational career; the world is all before him, but unhappily he is somewhat behind the world. He starts on his untried and perilous vocation, in some cheap, hopeful, because populous neighbourhood.

No fish nibble at his bait; not the tiniest chance sample of foraminifera is entangled in his net; his world, in fact, will not go near him, simply because a rival, *and* a druggist (all gas, late hours, and coloured bottles), without a whisper of compunction, attends to the varied ills to which flesh is heir. Then, in self-defence, the surgeon sets up his wretched retail, keeps shop or starves. The writer of these lines believes from actual intercourse, that the step is not taken without the most unadulterated and poignant grief. The first shock is not the greatest; there is excitement in the funeral morning which strangely assuages sorrow, but let the leaden days drag on; let the novelty of the situation pass, and then God help the man. For, as he surveys his dreary window, more desolate than the borders of the dead sea, and views his sparse and sepulchral bottles: his corn plasters that have ceased to stick; fly-covered perfumes bearing the seal of antiquity, but not the maker's; his rows of dirty syringes, and still dirtier capsules; his heart sinks, and he says within himself, "Was it for this I walked the wards of the stately hospital, never more dear to me than now? for this I watched the hand of Astley Cooper, and listened to the exquisite latinity of Sir Henry Halford? was it for this I studied at the bedside, and let the morning light startle the expiring lamp? I once had hoped to—." Drop the curtain, and keep an eye upon the prussic acid.

And now most excellent druggist, strive after liberality of thought; cultivate a tolerant mind, and learn that there is sharp misery elsewhere than in the ranks of pharmacy. Forbear to reap in fields where you should only glean; and if the same stern necessity reigns over you as sometimes on the surgeon, accept it not as a matter of exultation, but as one of the exigencies of your surroundings.

The way of mutual escape is obvious. Let the trade-surgeon neglect no professional means, however slight, of extricating himself from his degradation; let him not in his darkest hour accept diluted shop-keeping as the inevitable routine of life. Literature may perhaps lend a helping hand: anything rather than that he should supinely tarnish the grand association of which he is a member.

And let the druggist leave no stone unturned to develop the legitimate resources of his business. Let him not coast nervously too near the shore, but venture out on the broad ocean of endeavour, nor fear but that the prosperous breath of heaven will fill his sail. Brains and hard work will create new fields of industry, apart from the teaching of the school; if that be added, the druggist holds in his hand the key of trade success, and he may render unto Cæsar the things which belong to Cæsar with the most perfect equanimity.

A few personal words. The writer might have addressed his remarks to those who would have been predisposed to receive

his views with favour; he has advisedly appeared on a stage with which he was not familiar, and before an audience from whom he could not expect friendly criticism. Nevertheless, he commends the foregoing to the calm and patient thought of the reader. Let it be answered if requisite, not with the trick sentences of indignation and abuse which are so easy to write and so very difficult to read, but in the spirit in which these remarks are offered. Lastly, most respectfully be it stated, the Editor of this Journal is in no way responsible for any sentiment which this article contains.

THE BRITISH PHARMACOPEIA.

THE following article upon the delayed new edition of the Pharmacopœia is extracted from the editorial columns of the *Lancet* (Nov. 3):—

"When shall we have the new Pharmacopœia? It is indeed an evil, and more than an evil, that even October of this year has passed and the new edition is not issued. It is not honest for the Medical Council to continue selling the old edition, which, with all its imperfections on its head, ought to have been burned long ago. In May last, Dr. Quain presented, all ready (printed in slips), the new edition, and the Council gave strict orders that no unnecessary delay should occur in its publication; and yet, so far as one can see, in all probability a twelvemonth will elapse ere it emerges into the world. The Pharmacopœia is wanted, not only for this country but for its dependencies. A correspondent from India informs us that several hundred copies of the new edition are wanted there, and we believe that some hundred copies have been accordingly written for; but as no time can be fixed for the new issue, we presume that the old edition must be accepted. It is certainly a sharp business transaction to be selling now, at full price, what ought to be waste-paper. Looking back through the Minutes of the Council, one can but be struck with the general mismanagement or misfortune which has attended the production of this volume; the fussily procuring a special Act of Parliament; the great expense consequent on the large number of editors and their very high remuneration; the long delay and the careful locking-up of the proof-sheets until the last moment; and then the blunders which disfigured the volume when produced. The selection of Mr. Redwood as editor of the new edition, and the apparent concentration of power in his hands, promised better things; but Dr. Quain and his committee will have a yet more difficult explanation to give next year than they had last if they expect to satisfy the profession that due diligence has been used or that the present procrastination is justifiable, and that the present purchasers on whom the old Pharmacopœia is being put off at full price are not being politely taken in."

These strong words appear to have called forth an explanation of the delay, for in the *Lancet* of last Saturday the following article appears:—

"We are loth to say anything prospective of the new Pharmacopœia, but in reference to the remarks which we last week made touching the great delay which has occurred, and the apparently indefinite postponement of the publication of an edition which was read in slips in May last, we have been assured that there is every reason to anticipate the proximate completion of the task and the issue of the new edition 'early next year!' It is admitted that a very great deal of time has been consumed in the preparation of the work, but it is stated that delay cannot well be avoided when the several members of the committee reside so far apart, and where the frequent transmission of proofs and corrections has to be made. A source of a good deal of delay is to be found in the insertion of both the old and the new systems of notation, concerning which much discrepancy of opinion exists. This was, however, determined by the Council at their last general meeting. We are assured that there exists a very earnest desire to render the work worthy of itself and

of those under whose auspices it is issued, and to ensure its being useful and acceptable to the profession. All this may help to reconcile us to the delay, but meantime let purchasers beware of the old edition, which ought no longer to be sold at full price."



GOOD COUNSEL.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—As a subscriber to your Journal from its first appearance, I have been accustomed to read the major portion of it with a view to edification, and after having digested of the literary part quantum suff., I naturally turn to its correspondence columns for a little amusement.

The character of that department is sufficiently diversified. Sometimes, I may say not unfrequently, a contributor offers a valuable suggestion, throws a new light on a vexed question, or proffers some sage advice which is well worth the following. Free expression of thought being however rightly allowed, many a crotchety epistle finds place there and many a hobby is ostentatiously paraded, whose beauty and symmetry are apparent only to the eyes of its complacent rider. Much of it is written with an honest desire to promote the interests of the trade generally; much advice, kindly meant and well expressed, is tendered for universal acceptance by gentlemen undoubtcdly intelligent and sincere but, as I venture to think, of comparatively restricted observation; much that is Utopian is presented in sober seriousness as our legitimate aim; and unfortunately now and then some real or fancied grievance is testily obtruded in words fraught with envy, hatred, malice, and all uncharitableness.

A great deal has been written with reference to the present and future condition of druggists, not a little of which has contorted my features into a broad grin.

Some writers, whose business is almost exclusively a dispensing one, lamenting the low estate into which as they conceive the trade generally has fallen, affect to look down upon their brethren, whose employment is more varied, with something akin to disdain. They forget that neighbourhoods differ alike as to their inhabitants and their wants, and that a man who honestly meets the exigencies of the position in which he is placed is as great a convenience to his locality and quite as respectable as one who, merely from the accident of more advantageous surroundings, procures the means of living comfortably by the sale of physic alone.

Let such be thankful that the lines have fallen unto them in such pleasant places, but not regard their less fortunate brethren as beings of an inferior grade. If from any cause the trade (if I may use such an expression) of these exalted personages were to fail, it becomes a question as to which they would first admit into their establishments, the despised articles in which others deal, or a certain ill-favoured animal to which allusion has occasionally been made. For myself I doubt whether the high aspirations and ethical views of the very straitest of their sect would not give way before the approach of so ugly a visitor.

To me it seems more politic to make the best of things as they are, and to accept the trade in sundries in addition to medicinal preparations as a necessity of the times. Fate has placed me in a district where my dispensing would scarcely provide bread and cheese; albeit I doubt not that I do more in that branch of business than some of my neighbours. Not being content with such frugal fare, I am obliged to swell my returns by counter-prescribing and the sale of the thousand and one articles for which inquiry is constantly made. Altogether I manage to live comfortably, and am moreover egotistical enough to imagine that I am as much respected in the neighbourhood in which I reside as is the most exclusive pharmacist in his. It is a mere question of locality.

Again with reference to the Pharmaceutical Society and its relation to the trade generally. Some write of it in terms of unmixed admiration, some of envy, and some

even of contempt. In some sense they are none of them altogether right or altogether wrong.

The founders of that society deserve some amount of praise, and it should not be withheld. No one can deny that it was started with a sincere desire to raise the *status* of the chemist and druggist, and so conducted as in the opinion of the projectors was best calculated to promote that end. Their fault seems to have been that they aimed too high *at once*. They were, and their followers still are, in advance of the age.

The scientific education which that society proposes is higher than the generality of druggists seem yet to require. Without underrating the value of education in any way, I still believe that a large portion of the knowledge the Pharmaceutical Society's examination pre-supposes is rather ornamental than useful. If a man possesses it so much the better; but he may be a good business man and competent to serve the public with advantage and credit to himself, notwithstanding that his knowledge of abstract chemistry and botany attain not to the standard which it has set up. Hence, many persons are inclined to express a contempt for, or at least an indifference to, the distinctive appellation M.P.S., as giving those who write it after their names no commercial advantage over their untitled neighbours. Still, in one point of view, the society is useful. For as a little leaven by degrees leaveneth the whole lump, so its existence with its lofty aims must have directly or indirectly an influence over the whole body of chemists and druggists be they members of it or not; and although I am not associated with it myself, I should be sorry to see it altogether destroyed.

Many, however, less honest, act the part of the fox in the fable. While regarding the membership of the society as a distinction worth the having, they are either unable or unwilling to purchase it under the conditions at present imposed, and so exclaim, "The grapes are sour." Their diction is therefore the most replete with bitterness and abuse.

For my own part, I am a firm believer in the advantages that will result from an incorporation of the whole trade, and a compulsory examination in future. I am therefore a member of the United Society, which sets that object prominently forward. I am also desirous that some plan may be devised to render the Pharmaceutical Society the nucleus of such incorporation and of the examining body. It is in all fairness due to them as the reward of their past efforts. I do not in the least sympathise with those who heap reproach on the older association, nor do I despair of yet seeing the two societies amalgamated.

For why not? With all the prestige of its long existence, the Pharmaceutical Society is numerically weak, and represents but a comparatively small section of the trade. The starting of its younger rival on a more extended, though somewhat lower platform, originated in the failure of the other to draw the many within its fold. Let them but combine their efforts, which both profess to make with the same end in view, and the younger will aid the growth of the older, and the trade may yet attain to the higher platform in time to come.

Difficulties, of course, there are in the way of such fraternization, but a little mutual concession would easily remove them all. The Pharmaceutical Society cannot be expected to yield all claims to dignity and superiority, nor can the other party be required tamely to submit to any brand of inferiority. Nor is there any necessity for either.

My suggestion is as follows:—Let all existing *bond fide* chemists and druggists be admitted as members of the Society, paying a fee for registration. Let all who are now members by examination be made Fellows of the Society. Let all who may hereafter enter the trade be required to submit to such an examination as may be agreed on as sufficient to protect the public from being endangered through ignorance, (which is the only valid ground on which, I think, a compulsory examination can be asked for,) and reserve the honourable title of F.P.S. for those who can prove themselves worthy of being so distinguished by possessing a high degree of scientific education.

Would not some such scheme as that meet all the exigencies of the case. It would afford the public a sufficient guarantee against absolute incompetency, while it would still present the means of obtaining a mark of honour to those who are ambitious of winning it: it would gratify the wishes of those who deem perfect free trade in physic undesirable, while it

would replenish the coffers and widen the operations of the Pharmaceutical Society, and convert it into a College of Pharmacy.

That druggists may prove themselves less quarrelsome than they have of late appeared, and that an amicable adjustment of all their differences may be speedily arrived at, is the sincere desire of

Your obedient servant,
PHARMACOPOLA.

A PLEA FOR UNITY.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

DEAR SIR,—I am happy to see by your last impression we are somewhat regaining our former repose and good feeling; may peaceful and charitable motives always prompt us in all our undertakings and discussions.

Really, your Journal for the past few months, instead of binding the members of the United Society together by its influence, has, through the correspondence in its columns, caused by the late unfortunate dissensions in the Executive Committee, materially tended to widen the breach. I trust, however, tranquillity is again restored, and that all have become wiser and more earnest advocates for its welfare.

The programme of future operations issued by the new Executive is not only excellent but necessary, and if bold determination inspires them to carry it out, they deserve the hearty support of every member of the trade.

We have still a great work before us, and we must not be idle, and as the Pharmaceutical Council will not yet entertain any proposition encouraging friendly relationship, which I believe a great number of their members would prefer, we must in the language of the song, still "Paddle our own canoe," and be ready when the times comes to make for the haven of our incorporation:—the very purpose of our birth and the ambition of our existence. We should all keep our Society's motto in view, "Unity is Strength," and that such is the case with us particularly, we have had ample proof of in our parliamentary success, as regards the accomplishment of good and prevention of harm.

The British Pharmaceutical Conference is doing much to instil a friendly feeling amongst chemists by bringing them together under most laudable and improving circumstances, and it is a great pity that an arrangement, with its concomitant advantages, cannot be arrived at between the two societies.

Mr. Wade has written an able, unselfish, and suggestive letter bearing upon this subject in your Journal of this month, would that it had its merited consideration.

The indifference hitherto existing seems to be gradually evaporating, as our Belgravian colleagues have brought in a "Closing" Reform Bill, for which they cannot be sufficiently thanked, and their good example can, and no doubt will, be beneficially imitated in every town in the kingdom, to our comfort and happiness, besides being no expense or inconvenience when known to the public.

In conclusion, I must again ask your readers and yourself to give the new Executive hearty support, and, if they do as much for the Society as their predecessors have done, we shall have reason to bestow on them the same tribute of thanks which the late Executive fully deserve.

I have no doubt Mr. Buott will do his utmost in organizing branches in localities at present disconnected, and so bring more united action to bear on any particular point or movement.

I am, dear sir, yours obediently,
Rye, Sussex. Oct. 26, 1866.

A. W. SMITH.

OUR APPRENTICES.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—From the correspondence called forth by Mr. Inee's paper on Ethics, we obtain a variegated illumination of the druggist's mind. Mr. Barnard Proctor has favoured us with a code for example, by which his own establishment is now regulated. I have no desire to touch upon the rules relating to the division of labour, but to express an opinion only, that the duties laid down for the apprentices are not compatible with the feeling of educated youth, or in any way more

intellectual than those of the errand boy. If the standard for apprentices is to be taken from "Euclid and Virgil," then the requirements, on the other part, should be in accordance with that standard. In the *Pharmaceutical Journal* this month there is a letter, in which the writer expresses astonishment that in our day two assistants offered him their services, and both acknowledged that they had "never been taught Latin in any way." The writer also thinks that unless "the Examination of Apprentices is made compulsory by law, the social elevation of chemists as a body will be very minute." Of course the apprentice's ability to sweep cellars, clean windows, and take out parcels would not be tested in this examination, and it is my belief that for the sake of the chemists' social elevation, these duties ought to be always performed by the porter or errand boy. I presume Mr. Proctor's pharmacy may be taken as a fair specimen of other leading houses. If so, there need be little surprise that assistants have never been tutored in the Latin tongue. It must be a peculiar constitution capable of uniting the early associations of gentility, a classical education, and corresponding notions, with cleaning of cellars and other menial occupations. Is it for this instruction that premiums are paid? or is it expedient that such duties should be performed to prevent the rising generation imbibing notions above their position? Surely some medium might be discovered to keep the apprentice's mind rightly balanced between the lofty aspirations of a professional career, and the inferior duties of shop keeper, without causing his mind to revolt at work fit only for porters.

If these rules had emanated from an establishment where grocery and oils are combined with medicine and tobacco, I should not have been surprised; but the fact that they have been framed by one of the most practical, liberal, and intelligent of pharmacists is very discouraging. I feel the blush of early days at the bare thoughts of having had once to perform such drudgery. Who does not pity the Latin scholar doomed to window cleaning? If it is impossible to touch pitch without being defiled, so is it beyond dispute that such work tarnishes the self-respect due to gentle life. Dusting bottles, in some instances, is unavoidable: it is a responsibility, therefore, not degrading, not offensive to the most fastidious.

There appears, from certain remarks in the *Pharmaceutical Journal* to be a difficulty in avoiding extremes, not only in the duties of the shop, but also in the employment of spare time. The apprentice has to be steered between the rock of science on one side, and the whirlpool of licentiousness on the other, if early closing is adopted. What use will be made of the time is a question which occurs to many on granting their assistants an hour of recreation in the evening. Will the library be deserted for the Casino? Will the study be vacated for the music hall? What is the object we all profess to have in view? To advance the students of pharmacy in their business, as well as social positions. To make the life of apprentices more attractive than at present. To fill up the vacancy in assistant life, which is now becoming serious. To do this we require not so much to make their duties more arduous, by enforcing *study*, but by providing those social advantages which those in office life enjoy. The natures of young men differ in no respect, whether they study the *Pharmacopœia*, or the ledger, and they do not agree to enter a monastic life, forsaking healthy enjoyment for ascetic occupations, but they look to participating in society, above the vulgar herd, and enjoying the innocent pleasures of a home where virtue presides.

The druggists' hours are long. The careful vigilance and thought necessary, keep the mind braced to the fullest extent, that when the release arrives, why expect study to be resumed? It is then that he more especially requires to throw off the shop—the study until next day. It is then he wants the assistance of the drawing-room to remind him he is an educated gentleman. The chess-board, the piano, the agreeable converse of female society; the light literature of the day, as well as the many charms of the social circle. It is only when these are wanting that popular amusements are sought. I am not decrying the necessity for study, but a portion of the day should be given for that purpose, and not expected to be sought after the fatigues and labours of business. Early closing, sir, deserves your advocacy, so also do the unfettered movements of assistants when their business is done.

Yours truly,

RAVENSWORTH.

OUR ASSISTANTS.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—Some time since I applied for a situation as assistant, asking but a moderate salary, and was offered £25 per annum. That grand and munificent offer was made by a chemist in a first-class provincial city, doing one of the best businesses in the place. The excuse for so low a salary being offered was on account of my being rather short. Surely, things are coming to a pretty pass when men of business prefer height to intellect and experience. I of course would have been a "fine man" had I had my choice, but "what man by taking thought can add a cubit to his stature," and I am as I am. I have had eight years experience in the profession as a chemist and druggist, and have held first-class situations in England, Paris, and the British Colonies, and for that wide and varied experience am offered £25 per annum. I feel bound to give this publicity as a greater insult I consider could not have been offered, not only to myself, but to the entire body of chemist's assistants. I think it high time that assistants woke up to a true sense of their humiliating position, and took some steps by which the scale of salaries could be raised, and a fair remuneration obtained for fair and reasonable service. The only way that I can see to attain the desired object is by all assistants uniting and forming a society, after the style of the Trades' Union, for if any body of men require protection it is chemists' assistants. I should be glad to co-operate with any gentlemen for forwarding the above object, and should be glad to hear of any suggestions that may be offered.

I remain, sir, yours truly,
AUSTRALIAN.

London, Nov. 12, 1866.

THE EARLY CLOSING MOVEMENT.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—The Pharmaceutical Chemists and Chemists and Druggists of this city (Peterborough) unanimously agreed to close their establishments at eight o'clock every evening (Saturdays excepted) commencing on the 17th of September last, and up to the present time the arrangement has been strictly carried out, to the mutual advantage of the employers and employed. The early closing movement really works well here in every respect, and I trust it will ere long become general amongst the trade throughout the country.

I am, sir, yours respectfully,
J. P. LOVERIDGE, Hon. Loc. Sec. U.S.C.D.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

DEAR SIR,—I have great pleasure in being able to inform you that a deputation has waited on the chemists in Belgravia with reference to the early closing movement, and that their efforts have been crowned with some success, as out of the twenty-four chemists in this neighbourhood the following gentlemen have signed an agreement to close every evening at 9 o'clock, except Saturdays, and then at 10 o'clock, and entirely on Sundays:—

Mr. Bicknell, 38, Ebury-street,
Messrs. Bradley and Bourdas, 10, Pont-street,
Mr. O. G. P. Chard, 13, Eccleston-street, South,
Mr. G. D. Doughty, 4, William-street,
Mr. Thos. Elvey, 8, Halkin-street, West,
Mr. G. E. Goddard, 3, Chapel-street,
Mr. Wm. Gulliver, 33, Lower Belgrave-street,
Mr. J. M. Hucklebridge, 103, Upper Ebury-street,
Mr. F. Ward, 14, Grosvenor-street, West,
Mr. R. A. Watson, 38, Wilton Place.

I am, dear Sir, yours respectfully,
WM. BICKNELL.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—In your October number you kindly published a copy of an agreement signed by the chemists of South Belgravia, who had promised to fully carry out the system of early closing on and after October 1st.

So far this arrangement has been adhered to with only one exception, viz., Mr. D. J. Lewis, of 13, Upper Tachbrook-street, who, I regret to say, has had so little respect for his given word as to entirely ignore his part of the contract by

opening his shop on Sunday and other evenings as usual, and whose only excuse is "that he made a mistake."

It is much to be regretted that this gentleman now uses his best endeavours to upset the reform we have commenced in this district, more especially as we find our early closing has been appreciated by our customers, as few applications for medicines have been made after 9 o'clock.

I trust my neighbours will agree to leave him in his inenviable position, as a type of that class who can sign a bond and so quickly break it. Our brethren of Belgravia are so well pleased with our movement that they will commence and follow our example on Monday, November 12th.

I am, Sir, yours truly,

ONE WHO SIGNED THE AGREEMENT.

South Belgravia, Nov. 10th, 1866.

MEDICAL ETHICS.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—Your correspondent, "Ravenswood," has touched on a subject deeply affecting the interest of the suburban dispensing chemists. I for one have suffered considerably for years past by the dishonourable compacts existing between a large majority of consulting physicians residing in a small West-end circle and a few dispensing houses.

As an instance, I enclose you a letter I have lately received from one of my customers whom I sent to a physician, and I leave you to form your own opinion of the business qualifications of the favoured dispensing firm that required *two days* to prepare the following prescription:—

R. Hyd. oxyd. rub. præcip., gr. $\frac{1}{2}$.
Adipis p. p. t., 3ss.

Ft. Unguent. A small quantity to be applied to the roots of the eye-lashes at bed-time.

R. Aq. flor. aurant., 5j.
Spt. vini galliei, mxij.
Liq. plumbi diaacet. dil., 5j.
Aceti, mxij.
Pulv. tragacanth. co., 3ss.
Aq. rosæ, ad. 3ij.

M. ft. Collyrium, bis terv in die utend.

I am, Sir, yours respectfully,

November 9, 1866.

PIMLICO.

"Vauxhall-bridge-road, 2nd November, 1866.

"Sir,—My wife took our daughter to the physician you were good enough to recommend me. I did not send you the prescription as my wife was requested by the doctor to take it to a West-end chemist's firm near his residence, as he could depend on their drugs being good. I have now forwarded it to you, and shall be glad if you will be careful with it, and also send word when it can be made up, as the chemist we were sent to took two days to prepare it.

"Yours respectfully,

"To Mr. ——, Chemist.

"——"

ANOTHER VOICE FROM THE COUNTER.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

SIR,—The inordinate space of time which is demanded during every six days in the week from men engaged in business has, from the magnitude of the evil, begun to attract public attention, and may therefore form the subject of a few additional observations.

The invariable traditions of old people assure us that, since the middle of the last century, the hours of work have been gradually extended, and the old-fashioned holidays rapidly abridged.

In former days the substantial tradesman never thought of keeping open his shop after sunset in summer, and after six o'clock in the winter. Then, at dinner-time, business was stopped to give him and his assistants proper time for the enjoyment of the mid-day meal, as it is now in Germany, where it is as impossible to rouse the shopkeeper into activity between the hours of one and two as it would be at midnight.

But in London at the present time the case is widely different; the hours of business have encroached upon those proper for meals and rest to an extravagant degree—the consequence of the augmentation of human wants accompanying a vast increase of population.

It would seem that either so immense an aggregate of business has to be done to supply those wants, that a reasonable section of the day is insufficient to get through it, or that the business is conducted on essentially bad arrangements, which occasion so great a waste of time as to oblige people to do that at one part of the day which ought to be transacted at another. In a few cases, the first, while in a great majority the second, reason applies.

A remedy for the specific evils of which shopkeepers' assistants complain so justly may be easily discovered. It lies partly in the power of masters, and partly in that of purchasers. Were the former to close their shops at a seasonable hour, the public would become either more considerate, and buy what they want during daylight; or, persons with whom night-shopping is a matter of convenience, would make their own arrangements, so as to square with those of the tradesmen.

Unfortunately, however, so great is the competition in the retail trade of the metropolis, that were the shopkeepers of a particular neighbourhood to come to such a resolution, one keen trader would, in all probability, break through the rule, and get his shop crowded about bedtime with customers who had been too thoughtless to buy what they required at a seasonable hour. The neighbouring retailers would take alarm at this, and the old system be gradually returned to.

That the amelioration may be effectually carried out, masters must view the evil in a large and benevolent spirit, as becomes good citizens, and not with the huxtering and selfish views of immediate profit.

ALEXANDER COURtenay,
2, Lee Place. Chemist's Assistant.

THE CHEMISTS OF YORK.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—In common justice you will allow me space in your next impression for a short reply to a letter which appeared in your last from Mr. John Brown, Chemist and Druggist, of the city of York.

Although I felt called upon in common justice to defend Mr. Buott from a most unfair and ungenerous attack at the hands of one who had done his best to irritate, oppose, and obstruct him, yet I distinctly deny that I am the partisan or satellite of Mr. Buott, or any other man, as those terms are generally understood. And great as Mr. John Brown may be in the circle in which he is supposed to shine, I cannot see any greater presumption on my part in criticising the conduct of the York local secretary, than in his criticising the conduct of the secretary of the United Society. Mr. Brown says, "It is not true that he refused to return the petition of the United Society." All I know is, I received a letter from Mr. Buott, bearing date 22nd February, 1865, in which he writes, "The York petition is one of many which we have prepared and sent out at some expense. The Executive Committee reasonably ask that it may be returned to them for presentation, and your Mr. Brown tells them they shall not have it." Mr. Brown next states, "It is not true that the petition was sent to the Home Secretary, and that Mr. Buott knew well enough that it was not intended to be sent to the United Society." Now, I have another letter from Mr. Buott dated 25th February, 1865, in which, after complaining of Mr. John Brown's want of courtesy, comes the following:—"He was most respectfully requested (for several strategical reasons) to send the petition to us for presentation; but, no, he would send it direct to Sir George Grey." Now I ask any unprejudiced person wherein have I misrepresented the case? Knowing that the Home Secretary could not present a petition, Mr. John Brown sent it to a private member, at the same time writing to Sir George Grey.

Of course it is perfectly hopeless to attempt to convince Messrs. Buott and Hayland that such a plan of proceeding, as I have endeavoured to describe, was likely to have any tendency towards strengthening the powers of the United Society for the performance of the important work which lies before it. And however clear the contrary may appear to men of such extraordinary acumen as Mr. John Brown, that ordinary men cannot see it so evident; for what towns have been induced to follow in the luminous track pointed out to them by this would-be Pharmacological Solon?

I shall not occupy your space by following Mr. John Brown through all his vagaries, but will just say that the only time I assumed in any measure the duties of secretary during the period Mr. Brown was in office, was in giving Mr. Buott on one of his visits a helping hand in collecting subscriptions over a several months, and which, if Mr. Brown was secretary, he ought to have collected before.

I still as gravely as ever state it as my opinion, that in all matters affecting the general interests of the trade, a resolution, to carry any weight with it, ought to be in accordance with the feelings of the majority of the trade, and not of a small section; of course if the meeting consists of a majority of the body, the minority must give way, but when only a very small proportion of the trade is present, I contend that some of those who were absent should be consulted, or another meeting called to consider such resolutions. This I submit to be the proper course, where

policy is not preferred to principle. I dwell on this because I consider it a matter of some importance, for those who are absent are not always the drones.

I have attended every meeting that Mr. Buott has held in this city from the very first. As you yourself know I have written letters in your journal which have met with the kind approval of many in the trade. I have spared neither labour nor expense where I thought it possible to advance the interests of the United Society. And the very same number of the CHEMIST which contains Mr. Brown's letter, carries immediately underneath (and that, too, quite undesignedly) a sufficient refutation of his unfounded assertion of my being a drone.

Mr. Brown seems to insinuate that I wanted the office of secretary myself. Nothing can be further from the truth. I have declined the honour both before Mr. Brown was made secretary and after he had ceased to hold office.

I very gladly, in conclusion, leave it to your intelligent readers to judge which is in the right and which in the wrong, "Palmarum qui meruit ferut." I shall certainly not reply to any more of Mr. Brown's letters.

21, High Ousegate, York. Yours, &c., WM. CHAS. HAYLAND.

[We have omitted two or three passages in Mr. Hayland's letter, as their publication would only foment discord in York. The correspondence which terminates with this letter has not affected our opinion respecting Mr. Brown's conduct. We think that he showed his fitness for the post of local secretary of the United Society by his discreet action in reference to the rival bills. We may here correct a strange misprint in Mr. Brown's last letter. In our columns he is made to say that "the Pharmaceutical Society had the petition from York to assist them, and this was the result of no combined meeting." The passage, as written by him, was, "the Pharmaceutical Society had no petition from York to assist them, and this was the result of the combined meeting."—ED. C. and D.

EXHIBITION AT NOTTINGHAM.

TO THE EDITOR OF THE CHEMIST AND DRUGGIST.

Sir,—We observe in the CHEMIST AND DRUGGIST of the present month, in the list of articles reported as shown at the Exhibition in connection with the British Pharmaceutical Conference, that we are stated to have shown "Preserved Meats," this being entirely an error, we beg to lay before your readers a correct account of the articles exhibited by us.

Leith, Oct. 17, 1866.

We are, &c., JOHN GILLON, & Co.

A case containing Essence of Beef, Essence of Mutton, and Essence of Chicken in various sizes of tins; Essence of Beef Lozenges, a concentration of the Essence of Beef; Extractum Carnis, prepared by Liebig's process from Scotch ox beef; Neat's-foot Oil; Marrow.



THERE has been only a moderate business transacted in chemicals during the past month, and notwithstanding the further reduction in the Bank rate of discount, buyers only take small quantities to supply their actual wants. There has been rather more doing for export. Business, however, is sound, and has a somewhat improving appearance. A moderate demand has been experienced for Tartaric Acid, and some business has been done at 1s 3½d. Oxalic Acid is steady at 11d. There is more doing in Citric Acid, and the price has advanced to 1s. 11½d. to 2s. Chlorate of Potass remains quiet at 13d., and Sal Acetos at the same price. More doing in Prussiate of Potass at 12½d. to 13d., and some fair parcels of Bichromate of Potass have been taken at 5½d. to 5¾d. Iodine is quiet and nominal at 9½d. to 9¾d. A good business was done early in the month in French Quinine at 4s. 5d. to 4s. 6d.; but the market remains quiet at the former figures. English is steady at 5s. A good business has been done in Soda Crystals at 125s. to 127s. 6d. ex-ship. Large sales made in Ash at 2½d. to 3½d. according to make. Sulphate of Copper is better; sales made at 2s. 3d. to 27s. Sulphate of Ammonia is steady at 11s. to 12s. Sal Ammoniae remains at 35s. 6d. to 37s. 6d. Caustic Soda is firm at 20s. and 27s. 6d., and Bicarbonate at 21s. to 22s. Bleaching Powder is held for 15s. to 16s. 6d. Alum is steady at £7 10s. in tierces, and £7 15s. in barrels. Cream of Tartar is dull, and the price has declined to 83s. to 85s. Turpentine is rather better; sales of American 42s., French 40s. to 46s., and to arrive 39s. to 39s. 6d. A large business has been done in Petroleum at 1s. 6d. to 1s. 7d., the latter price is now paid both on the spot and forward; 1s. 9d. has been paid for a cargo of white

for the Continent. Linseed Oil is again rather better, and closed at 37s. 6d. to 38s. spot, and 36s. 9d. to 37s. in Hull up to Dec. Rape is also a trifle better. Refined Saltpetre is dull, and the price declined to 24s. to 25s., cash f.o.b.

In the Drug market a fair business has been done at barely late prices. Bengal Turmeric has sold at 24s. 6d. to 25s. on the spot, and 25s. for arrival. Good Bengal Safflower is again rather dearer. About 300 chests China Rhubarb has been offered, and the greater part sold, at rather dearer prices; round sold at 2s. 9d. up to 5s. 2d., and flat 3s. to 4s. 6d. All kinds of Bark have realized full prices. Gamboge is lower, and Arabic does not support the late advance. Turkey Opium is steady. Senna is without change, except Bombay, which is rather easier. Aloes are without change. Balsam Capivi sold at 1s. 10d. to 1s. 10½d., which is rather dearer. Fresh Roll Annatto has brought full prices; stale lots are rather lower. Castor Oil has sold steadily, and Citronelle at 3½d. to 3¾d. Oil Cassia is 7s. 9d. and quiet. Oil Anniseed is steady at 9½d. China Vermillion is 3d. lower. Ipecacuanha is now 11s. to 11s. 6d., which is also rather cheaper. East India Tamarinds are lower. Shellac is fully 5s. dearer for orange. Cubes are steady. Catech is firm at 32s. for fine. Gambier is lower; Cubes selling at 30s. to 30s. 6d. Saltpetre is lower and dull. Arrow Root is 0½d. to 0½d. lower. Cochineal is 1d. cheaper and less in demand. In other goods sales are small, and prices generally rather in favour of the buyers.

PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mining Lane. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1866.	1866.	1865.	1865.
	s. d.	s. d.	s. d.	s. d.
ARGOL, Cape, per cwt.	70 0	80 0	75 0	90 0
French	56 0	76 0	58 0	83 0
Oporto, red	30 0	32 0	45 0	47 0
Sicily	67 6	70 0	72 6	75 0
Naples, white	66 0	71 0	68 0	76 0
Florence, white,	85 0	90 0	0 0	0 0
red	77 0	80 0	0 0	0 0
Bologna, white	87 0	90 0	90 0	95 0
ARROWROOT. (duty 4½ per cwt.)				
Bermuda, per lb.	1 0	1 4	1 2	1 6
St. Vincent	0 2½	0 5½	0 2½	0 6
Jamaica	0 3	0 4½	0 3	0 5½
Other West India	0 2	0 3½	0 2½	0 3½
Brazil	0 2½	0 3	0 2½	0 3
East India	0 2½	0 4	0 2	0 3½
Natal	0 3½	0 7½	0 4½	0 8½
Sierra Leone	0 3½	0 4	0 3½	0 4½
ASHES.per cwt.				
Pot, Canada, 1st sort	37 0	0 0	29 6	0 0
Pearl, ditto, 1st sort	45 0	0 0	30 6	0 0
BRIMSTONE,				
rough....per ton	130 0	0 0	135 0	0 0
roll	195 0	205 0	195 0	205 0
flour	245 0	260 0	245 0	250 0
CHEMICALS,				
Acid—Acetic, per lb.	0 4	0 0	0 4	0 0
Citric	1 11½	2 0	1 11	2 0
Nitric	0 5	0 5½	0 5	0 5½
Oxalic	0 11	1 0	1 0	0 0
Sulphuric	0 0½	0 1	0 0½	0 0
Tartaric crystal.	1 3½	1 3½	1 5½	1 0
powdered	1 5	1 5½	1 6	0 0
Alum	150 0	155 0	140 0	145 0
powder	170 0	0 0	160 0	0 0
Ammonia, Carbonate, per lb.	0 5½	0 5½	0 5½	0 5½
Sulphato	220 0	240 0	260 0	0 0
Antimony, oro	200 0	220 0	180 0	0 0
crude	24 0	25 0	24 0	25 0
regulus	34 0	0 0	33 0	0 0
French star	34 0	0 0	33 0	34 0
Arsenic, lump	15 0	15 6	15 0	15 6
powder	6 6	7 0	6 0	6 6
Bleaching powder	15 0	15 6	13 0	13 6
Borax, East India refined	0 0	0 0	0 0	0 0
British	65 0	0 0	54 0	0 0
Calomel	2 5	2 6	2 8	0 0
Camphor, resin d.	1 8	0 0	1 4½	0 0
Copperas, green	52 6	55 0	50 0	52 6
Corrosive Sublimate, per lb.	1 11	0 0	2 2	0 0
Green Emerald	0 0	0 0	0 0	0 0
Brunswick	per cwt.	0 0	0 0	0 0

CHEMICALS.	1866.	1866.	1865.	1865.
	s. d.	s. d.	s. d.	s. d.
Iodine, dry	0 9½	0 9½	0 6	0 0
Magnesia, Carbon.	42 6	45 0	42 6	45 0
Calchned	1 6	1 8	1 0	1 8
Minium, red	22 0	23 6	21 0	0 0
orange	32 6	0 0	30 0	0 0
Potash, Bichromate	0 5½	0 5½	0 6	0 0
Chlorate	1 1	0 0	1 2	0 0
Hydriodate	0 7	0 7½	0 0	0 0
Prussiate	1 0½	1 1	1 0½	1 0½
rod	1 9½	1 10	1 9½	1 10
Precipitate, rod	0 0	2 6	2 9	0 0
white	0 0	2 5	2 9	0 0
Prussian Blue	1 0	1 10	1 0	1 10
Rosa Pink	29 0	0 0	29 0	0 0
Sal-Acetos	1 1	0 0	0 0	1 1½
Sal-Ammoniac	per cwt.			
British	35 6	37 6	35 6	38 0
Salts, Epsom	8 6	9 0	8 6	0 0
Glauber	5 0	6 0	5 0	5 6
Soda, Ash	0 2½	0 3½	0 2½	0 2½
Bicarbonate	20 0	21 6	17 6	18 0
Crystals	125 0	127 6	125 0	130 0
Sugar Lead, white	38 0	0 0	36 0	0 0
brown	27 0	0 0	26 6	27 0
Sulphate Quinine	per oz.			
British, in bottle	5 0	0 0	5 3	0 0
Foreign	4 5	4 6	4 11	5 2
Sulphate Zinc	per cwt.	0 0	0 0	15 0
Verdigris	0 11	1 0	0 11	1 0
Vermilion, English	2 9	3 0	2 11	3 3
China	2 6	2 9	2 10	3 0
Vitriol, bluo or Rom.	per ct.	25 6	28 0	31 0
COCHINEAL, per lb.				
Honduras, black	3 0	4 7	3 3	5 0
silver	3 0	3 9	2 0	3 6
Mexican, black	3 5	0 0	3 2	3 7
silver	3 5	3 7	3 1	3 2
Lima	0 0	0 0	3 0	3 2
Teneriffe, black	3 5	4 10	3 5	4 0
silver	3 4	3 8	3 4	3 6
DRUGS,				
Aloes, Hepatic	per cwt.	80 0	190 0	190 0
Socotrine	140 0	290 0	140 0	290 0
Capo, good	36 0	40 0	46 0	50 0
inferior	20 0	35 0	28 0	44 0
Barbadocs	50 0	260 0	70 0	280 0
Ambergris, grey	28 0	36 0	22 0	25 0
Angelica Root	per cwt.	0 0	20 0	35 0
Anised, China star	75 0	78 0	160 0	210 0
Germau, &c.	26 0	40 0	24 0	40 0
Balsam, Canada	per lb.	1 8	1 9	0 10
Capivi	1 10	1 10½	1 8	1 8½
Peru	5 6	0 0	4 9	0 0
Tolu	3 0	0 0	2 11	3 0
Bark, Cascilla	per cwt.	18 0	29 0	23 0
Peru, crown & grey per lb.	1 3	2 2	0 9	2 0
Calisaya, flat	2 6	2 8	2 2	2 9
quill	2 0	2 5	2 0	2 8
Carthageua	1 0	1 6	0 10	1 9
Pitayo	0 7	2 0	0 10	2 2
Red	2 6	12 0	1 9	10 0
Bay Berries	per cwt.	0 0	0 0	0 0
Bucca Leaves	per lb.	0 3½	0 10	0 6
Camomile Flowers	40 0	120 0	20 0	110 0
Camphor, China	130 0	132 6	90 0	92 6
Canella alba	75 0	82 6	23 0	33 0
Cantharides	per lb.	2 6	2 7	2 4
Cardanomus, Malabar, good	5 6	6 3	6 0	5 10
inferior	3 9	5 3	4 6	5 5
Madras	3 6	5 3	2 9	4 0
Ceylon	3 6	4 0	3 3	4 0
Cassia Fistula	per cwt.	18 0	35 0	23 0
Castor Oil, 1st pale	per lb.	0 7	0 7½	0 6½
2nd	0 6½	0 7	0 5½	0 6
inferior and dark	0 6	0 6	0 4½	0 5
Bombay, in casks	0 5½	0 6	0 4½	0 5
Castorium	1 0	20 0	1 0	20 0
China Root	per cwt.	20 0	40 0	0 0
Cocculus Indicus	20 0	30 0	27 0	28 0
Cod Liver Oil	per gal.	4 0	8 0	3 6
Coloecynth, apple	per lb.	0 7½	1 0	0 7
Colombo Root	per cwt.	80 0	100 0	310 0
Cream Tartar				
French	82 6	85 0	97 6	102 6
Venetian	87 6	0 0	102 6	0 0
grey	80 0	82 6	90 0	95 0
brown	80 0	0 0	90 0	92 0
Croton Seed	240 0	260 0	460 0	530 0
Cubeb	67 6	72 6	82 6	85 0
Cumin Seed	17 0	23 0	19 0	23 0
Dragon's blood reed	240 0	340 0	240 0	300 0
lump	85 0	280 0	80 0	260 0
Galangal Root	11 6	12 6	13 0	15 0
Gentian Root	16 0	17 0	21 0	22 0
Guinea Grains	62 0	68 0	56 0	61 0
Honey, Narbonne	50 0	70 0	40 0	50 0
Cuba	26 0	40 0	25 0	33 0
Jamaica	25 0	55 0	26 0	31 0
Ipecacuanha	per lb.	10 6	11 0	8 6
Isinglass, Brazil	2 2	4 0	2 0	5 3
East India	1 10	4 7	1 4	4 4
West India	3 9	4 1	3 9	4 2
Russian	8 0	11 0	8 0	10 9
Jalap	0 9	5 6	1 0	5 3

